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KING EDWARD VII SANATORIUM MIDHURST

(FOUNDED BY H.M. KING EDWARD VII IN 1903 WITH FUNDS
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PRESIDENT :

HIS MAJESTY THE KING

THIRTY-FIRST

ANNUAL MEDICAL REPORT

JULY 1936 to JUNE 1937

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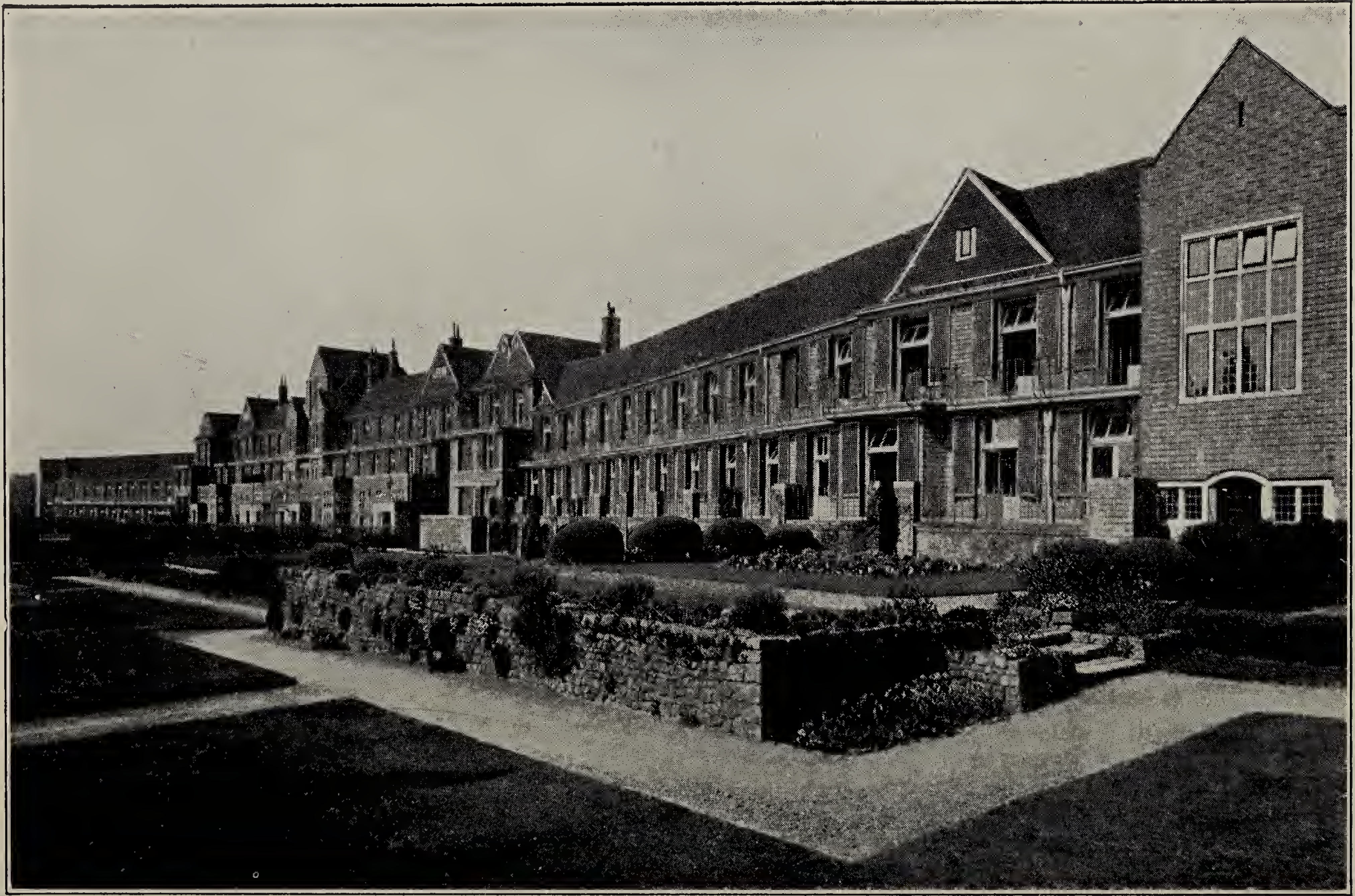

King Edward VII Sanatorium, Midhurst.
South Elevation of Patients' Block.

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KING EDWARD VII SANATORIUM

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KING EDWARD VII SANATORIUM
MIDHURST

Thirty-first Annual Medical Report

JULY 1936 to JUNE 1937

DURING the period July 1st 1936, to June 30th 1937, 262 patients were admitted to the Sanatorium; 57 of these being readmissions.

During the same period 245 patients were discharged. Nineteen patients who remained for a period of less than 9 weeks and are not followed up in the after-history records and 37 readmissions are considered in separate tables. One readmission case died in the Sanatorium. The remaining 189 patients discharged during the year were grouped according to condition on admission, as follows :—

Group I	34
Group II	120
Group III	27
Group IV	8

(Details of classification to be found on page 9.)

Applications for particulars of admission totalled 476, and the average waiting list has been 24–25 for men and 22–23 for women—an increase in both cases.

Forty-nine applicants were examined by the Medical Superintendent, as compared with 80 last year and 102 in the previous year. It will be observed that fewer applicants are examined in London than formerly. This is merely due to the fact that many more cases are put on the list by Members of the Consulting Staff. Of the 49 patients examined, 42 (85.7 per cent.) were accepted for treatment and 7 (14.3 per cent.) rejected as unsuitable according to the rules for admission to the Sanatorium.

There were only 8 Group IV cases discharged during the year, as against 13 the previous year. Of these, 6 had pleural involvement of varying degrees and two were query lower lobe dry bronchiectases.

Needlework classes have again been held regularly and are a source of pleasure and interest to many patients—including bed-patients, who are visited each week by a skilled craft worker. Many of them have become very proficient in the art of embroidery and have been encouraged to create original designs.

The quality of the Talking Picture Programmes held at weekly intervals throughout the winter has been improved, a new travel feature proving very popular. Attendances have been high throughout the year.

Concerts and plays have again been held twice monthly, and it was a pleasure to note that two outstanding successes were an entertainment given by the Staff, and the Patients' Concert. Both were of a high standard and were most enthusiastically received.

The shop has further extended its services : it is now possible for a customer to have his clothes dry-cleaned and pressed, and his boots and shoes repaired.

We are indebted to the Times Book Club for the advice we receive from them twice yearly, thus enabling us to place the finest books of the day on our shelves. Catalogues of recent additions to the library are now compiled and a copy is given to each patient on arrival.

The Patients' Committee has held numerous whist drives and has shown great ingenuity in devising interesting competitions for the entertainment of bed-patients.

The Church Services in the Chapel have been held as usual each Sunday, and there have been special services on Christmas Day and Armistice Day. Holy Communion is also celebrated twice a month in the main building, when the Chaplain takes the Sacrament to patients in bed.

We wish to thank the Council and Consulting Staff for their valuable services and the active interest they have taken in the welfare of the Sanatorium during the year.

Our sincere thanks are due also to all Members of the Staff resident at the Sanatorium for their loyal and valuable work.

GENERAL STATISTICS

The following tables show an analysis of the 189 new patients discharged during the year, under the following headings :—

(1) Place of Residence.
(2) Occupation.
(3) Age and Sex.
(4) Married or Single.
(5) Mode of Onset of Disease.
(6) Duration of Disease.

TABLE I.—PLACE OF RESIDENCE.

Place of Residence	Number of Patients	Place of Residence	Number of Patients
London	57	Northern Ireland	3
Irish Free State	16	Scotland	3
Middlesex	16	Somerset	3
Surrey	11	Channel Islands	2
Sussex	11	Herefordshire	2
Buckinghamshire	8	South Africa	2
Essex	7	Wales	2
Yorkshire	7	Cambridgeshire	1
Hampshire	6	India	1
Kent	6	Norfolk	1
Lancashire	5	Northamptonshire	1
Devon	4	Northumberland	1
Warwickshire	4	Staffordshire	1
Bedfordshire	3	Suffolk	1
Hertfordshire	3	Wiltshire	1
			189

TABLE II.—OCCUPATION.

Occupation	Number of Patients	Occupation	Number of Patients
Clerks	38	Apprentices	1
Housewives	26	Airways Officials	1
Secretaries	12	Architects	1
Schoolteachers	11	Buyers	1
Nurses	9	Cashiers	1
Managers	7	Chemists	1
Accountants	6	Civil Servants	1
Commercial Travellers	6	Clergymen	1
Students	6	Dental Surgeons	1
Army	5	Directors	1
Nil	5	Dispensers	1
Medical Practitioners	4	Estate Agents	1
Schoolchildren	4	Factory Inspectors	1
Civic Guards	3	Hospital Matrons	1
Engineers	3	Labour Masters	1
Shopkeepers	3	Lecturers	1
Surveyors	3	Manufacturers	1
Arts & Crafts Workers	2	Riding Mistresses	1
Barristers	2	Rubber Planters	1
Builders	2	School Matrons	1
Farmers	2	Shop Assistants	1
Insurance Officials	2	Solicitors	1
Journalists	2	Supervisors	1
Royal Navy	2	Veterinary Surgeons	1
			189

TABLE III.—AGE AND SEX.

Years	Males	Females	Total
Under 20	2	4	6
20–25	22	24	46
26–30	25	16	41
31–35	25	16	41
36–40	18	3	21
41–45	12	3	15
46–50	3	5	8
Over 50	8	3	11
	115	74	189

TABLE IV.

Married	78
Single	111
	189

TABLE V.—MODE OF ONSET OF DISEASE.

Mode of Onset	Number of Cases	Percentage
Cough	49	25.9
Lassitude	49	25.9
Hæmoptysis	35	18.5
Pleurisy	19	10.1
Loss of Weight	6	3.2
Pneumonia	4	2.1
Influenza	3	1.6
Other Modes	24	12.7
	189	—

TABLE VI.—DURATION OF DISEASE.

Average Duration	1 year 11 months.
Extremes	4 weeks—20 years.

Table VII.—General Results of Treatment as Shown by the Condition of the Patients on Admission and on Discharge From the Sanatorium During the Year 1936–37.

Group on Admission	Number of Cases	Arrested	Much Improved	Improved	Stationary or worse	Died in Sanatorium
IA ...	27	26	—	1	—	—
IB ...	7	3	4	—	—	—
IIA ...	49	39	6	3	1	—
IIB ...	71	23	24	22	2	—
IIIA ...	2	—	1	1	—	—
IIIB ...	25	1	3	14	7	—
All Cases	181	92	38	41	10	—
IV { Patients in whom no definite evidence of Pulmonary Tuberculosis was found }		8				

The above table shows that 50% of the cases were discharged with " disease arrested," as compared with 39% last year. This favourable result is due to the fact that an increased number of patients had active treatment, such as artificial pneumothorax, phrenic evulsion or thoracoplasty.

Another noteworthy point is that there have been fewer Group IV patients this year.

As in the last report, the classification has been altered to include a letter with the group numeral to signify a Positive or Negative sputum : A for Negative ; B for Positive.

Groups.—As in previous Annual Reports, the Turban-Gerhardt classification has been used to indicate the clinical condition of patients on admission. This classification, based on physical signs, is as follows :—

> *Group I.*—Disease of slight severity, limited to small areas of one lobe on either side, which, in the case of affection of both apices, does not extend beyond the spine of the scapula or the clavicle, or, in the case of affection of the apex of one lung, does not extend below the second rib in front.
>
> *Group II.*—Disease of slight severity, more extensive than Group I, but affecting at most the whole of one lobe ; or severe disease extending at most to the half of one lobe.
>
> *Group III.*—All cases of greater severity than Group II, and all those with considerable cavities.

By " disease of slight severity " is to be understood : disseminated foci characterised by slight dullness, indefinite rough or weak vesicular or broncho-vesicular breathing, and fine medium crepitations.

By " severe disease " is meant massive infiltration, recognised by definite dullness, broncho-vesicular or bronchial breathing, with or without crepitations.

Cases with signs of considerable excavation, giving rise to tympanitic percussion with amphoric or cavernous breathing and numerous coarse consonating rales, come under Group III.

Pleuritic dullness, if only of slight extent, is to be left out of account ; if it is considerable, pleuritis should be specially mentioned under tuberculous complications.

The following terms are used to describe the condition of patients on discharge from the Sanatorium :—

> " DISEASE ARRESTED."—General health completely restored in every respect, without any sign of disease of the lungs except such as is compatible with a completely healed lesion ; sputum, if still present, free from tubercle bacilli.
>
> " IMPROVED."—General health improved, but not restored ; physical signs of disease in the lungs still present, though less marked than on admission.
>
> " STATIONARY."—No appreciable improvement in the condition of the lungs or in the general health.
>
> " WORSE."—General or local condition worse.

TABLE VIIIA.—DEMONSTRATION OF T.B. IN SPUTUM.

On Admission		*On Discharge*	
Positive	103	Positive	62
Negative	45	Negative	55
No Sputum	33	No Sputum	64
Group IV	8	Group IV	8
	189		189

In 41 cases T.B. Positive sputum on admission became negative or cleared up completely : tubercle bacilli were absent in 26 cases and the remaining 15 had no sputum on discharge.

Eighteen patients with T.B. Negative sputum on admission had no sputum on discharge.

TABLE VIIIB.—ANALYSIS ACCORDING TO TREATMENT OF SUCCESSFUL SPUTUM RESULTS, 1936–37.

Treatment	T.B. Positive cases becoming Negative	T.B. Positive cases having no sputum on discharge	Total
Sanocrysin	10	6	16
Routine Treatment ...	7	3	10
Artificial Pneumothorax	3	5	8
A.P. Phrenic	2	—	2
Phrenic Evulsion ...	1	—	1
Thoracoplasties ...	3	1	4
	26	15	41

Eighteen T.B. negative cases had no sputum on discharge.

TREATMENT.

A.P.	7
A.P. Phrenic	1
A.P. Sanocrysin	1
Sanocrysin	1
Routine Treatment	7
Thoracoplasty	1
Total	18

It will be seen from the above tables that 62 of the 189 patients, or 32%, still had a positive sputum on discharge. Most of these patients were, in all other respects, to be regarded as in very good physical condition. We have kept in touch with most of them frequently, and a number of them have lost their sputum entirely or it has become negative since the termination of the year covered by the report. But the proportion of patients discharged with a positive sputum is still considerably higher than we would wish, and it is worth while noting some of the factors influencing this.

In the first place, our criteria of what constitutes a negative sputum have become more rigorous. It is not now regarded as sufficient to have microscopical examinations alone : every " negative " sputum is put up on the Loewenstein culture medium and many which would otherwise be classed as " negative " are thereby proved to be " positive." Secondly, the waiting-list for beds is now so long that the average length of stay must necessarily be kept within reasonable limits ; and this will naturally first affect some of the more chronic positive cases. The average length of stay during the year has been 5 months, 3 weeks. Fortunately, the effect of this pressure on our beds is less serious than it would at first appear, as the class of patients who come to the Sanatorium have the means, in most cases, to continue their routine treatment outside the Sanatorium, if it should still be necessary. A number of them, if their doctors approve, come to live for a time in the vicinity, and continue to live according to the regime which they have learned to carry out here. Their Sanatorium treatment, therefore, by no means ends with their discharge. And, in the meantime, their places have been taken by other patients, many of whom urgently require active treatment, which can only be performed in a Sanatorium fully equipped for surgical work.

These patients who have been discharged with a positive sputum have been carefully taught how to avoid endangering the health of others, and are not such a menace to the public as the numbers of undiagnosed cases of active pulmonary tuberculosis who live normal lives with such diseases as " smoker's cough" and " bronchitis." We do, however, ask them all to refrain from working in closed communities until their sputum has dried up or become negative, which often occurs within a few months of discharge.

This year we have added an analysis of the T.B positive cases that became negative in the Sanatorium in relation to treatment. A similar analysis of the 18 T.B. negative cases who had no sputum on discharge is included.

TABLE IX.—WEIGHT.

Weight	Group I	Group II	Group III	Group IV	Totals
Gained	29	89	15	7	140
Lost	4	25	4	1	34
No Change	1	1	—	—	2
Not Weighed	—	5	8	—	13
All Cases	34	120	27	8	189

RE-ADMISSION CASES

Of the 245 patients discharged, 36 were readmission cases, compared with 52 last year and 32 the year before. One patient readmitted during the year died in the Sanatorium following thoracoplasty operation.

The following table compares the clinical condition of these cases on their previous discharge with that on their readmission.

TABLE I.

Group	Number of Cases	
	On Previous Discharge	On Re-admission
Group I	2	1
Group II	25	23
Group III	9	12
Group IV	—	—
	36	36

As we have already said, a number of patients are discharged who still require to continue, under careful supervision, a strict sanatorium régime after their discharge, and we realise from the outset that it may be found necessary at a later date to readmit some of these patients in order to carry out some further form of special treatment. This year 25 out of the 36 cases readmitted had active treatment, 12 requiring Artificial Pneumothorax, 8 Thoracoplasty, 3 Phrenic Evulsion, 1 Apicolysis, and 1 a further course of Sanocrysin.

Included in the thoracoplasty cases are those cases of Pyo-pneumothorax who go home and continue to attend here for pleural washouts until the general and local condition in each case is such that thoracoplasty can be undertaken with a minimum of risk.

TABLE II.

Group	Arrested	Much Improved	Improved	Stationary or worse	Died in the Sanatorium	Totals
I ...	1	—	—	—	—	1
II ...	9	8	6	—	1	24
III ...	2	1	6	3	—	12
IV ...	—	—	—	—	—	—
All Cases ...	12	9	12	3	1	37

Table II shows that, of the 37 readmission cases, 12 were again discharged " arrested," 9 " much improved," and 12 " improved."

All the figures go to show the importance of readmitting the patient to an institution should the signs heralding a breakdown occur, as, try as one will, home treatment will not then suffice and active collapse therapy, such as Pneumothorax and Thoracoplasty is, of course, out of the question in home surroundings.

REPORT OF THE THROAT DEPARTMENT

The larynx of each of the 250 patients discharged during the year under review was examined by Sir St Clair Thomson. Definite tuberculous disease was present in 11 cases, as compared with 8 last year, and 20 in the previous year, and the larynx in the remaining 239 cases was found to be normal.

The results of treatment are shown in Table I.

TABLE I.—SHOWING THE RESULT ON DISCHARGE OF TREATMENT IN PATIENTS SUFFERING FROM TUBERCULOSIS OF THE LARYNX IN WHOSE SPUTUM TUBERCLE BACILLI WERE DEMONSTRATED IN THE SANATORIUM.

Classification	Number of cases	Cured	Much Improved	Improved	Stationary or worse	Remarks
Group I	—	—	—	—	—	The case discharged, disease cured, was treated with Galvanocautery.
Group II	4	1	2	1	—	
Group III	7	—	1	4	2	
	11	1	3	5	2	

Of the 11 patients treated for disease of the larynx, 2 were thoracoplasty cases, 2 had phrenic operations, 4 had artificial pneumothorax treatment and in one case gold therapy was used.

In 2 cases, including one treated with Galvanocautery, the sputum became negative.

It is gratifying to note that the number of patients with a definite Tuberculous Larynx is still small compared with the number of patients admitted during the year. This is, in our opinion, due to earlier diagnosis so that the patients come under treatment at an earlier stage than was the case a few years ago.

It would also seem that tuberculosis of the larynx occurs in a less serious form than a decade ago.

ARTIFICIAL PNEUMOTHORAX

During the period 1925–36 artificial pneumothorax has been attempted in 242 cases and 187 were successful.

Of these 187 patients, 145 (77.5 per cent.) are now alive ; and reports received from them this year with reference to sputum and continuance of refills are tabulated, as follows :—

TABLE I.

	No Sputum	T.B. Negative	T.B. Positive	Not Tested	Totals
Ceased Refills ...	63	13	5	27	108
Continuing Refills ...	16	4	8	9	37
	79	17	13	36	145

As recorded graphically, there is again a slight increase in the number of patients receiving artificial pneumothorax treatment, 64 cases, in all, having this form of collapse therapy during the period under review.

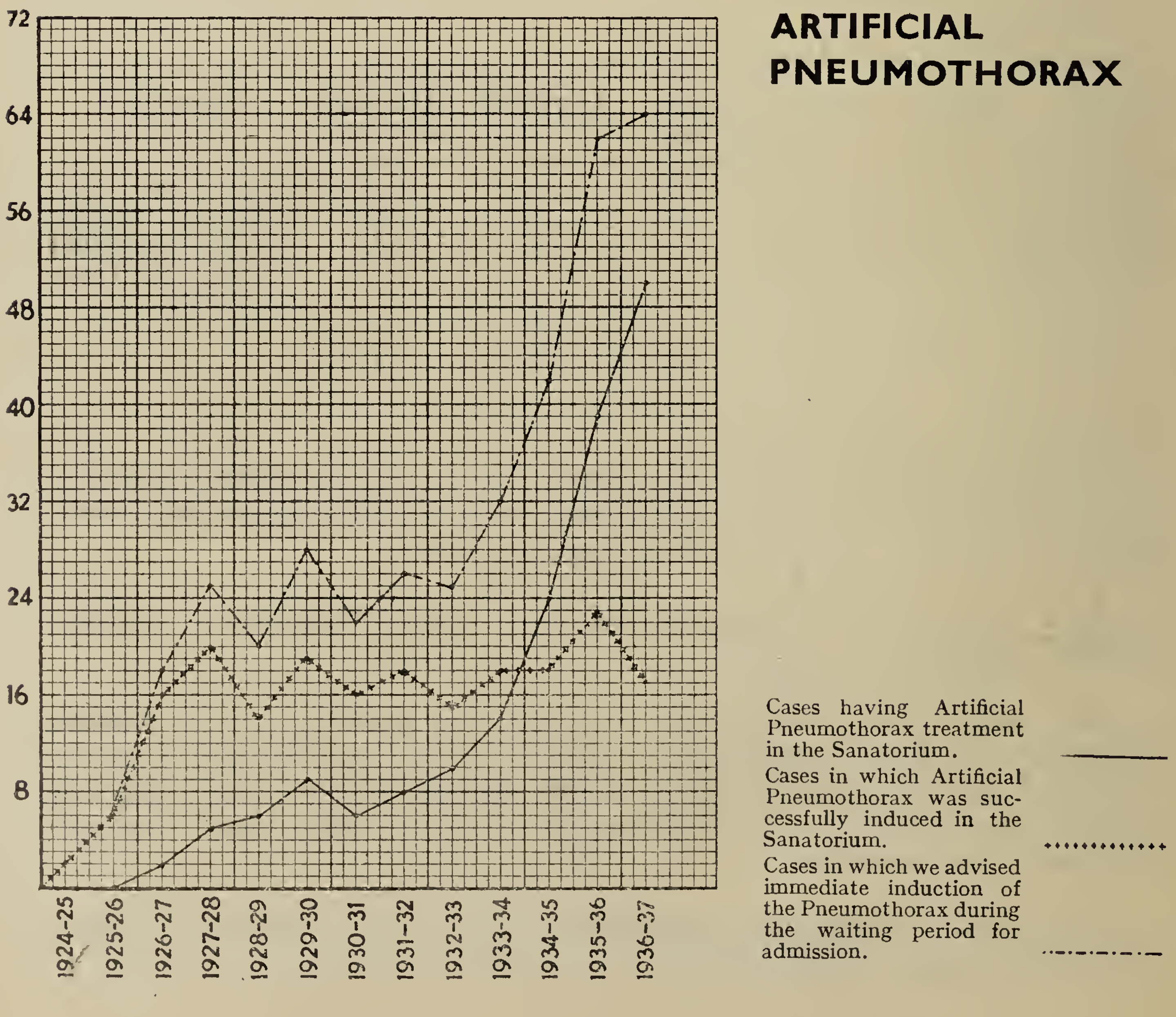


TABLE II.—AN ANALYSIS OF CASES IN WHICH ARTIFICIAL PNEUMOTHORAX WAS SUCCESSFULLY INDUCED IN THE SANATORIUM.

Classification	Larynx Healed	Sputum on Admission		Sputum on Discharge	
		No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
Choice I	—	2	6	7	1
Choice II	—	1	6	2	5
Choice III ...	—	—	2	—	2
All Cases	—	3	14	9	8

Eight of the 17 cases of artificial pneumothorax successfully induced in the Sanatorium had a trace of positive sputum on discharge. Of these, 4 are living in the vicinity and continue refills here, 3 have been admitted to Brompton Hospital for thoracoplasty operations and one has returned home to Ireland, where he is continuing artificial pneumothorax treatment.

It will be noted that, although the number of operations performed in our own theatre increases yearly, we still discharge a few patients to Brompton Hospital for thoracoplasties. We are obliged to adopt this course owing to the pressure of our long waiting list at Midhurst. In order to lose no time, it is often expedient to arrange for patients who need immediate treatment to be discharged to Brompton Hospital.

One might be inclined to think that the proportion of artificial pneumothorax cases induced yearly is small for a Sanatorium of this size. It is significant, however, that the number of patients having pneumothorax treatment on our advice during the waiting period for admission has increased to 51. The following table speaks for itself and indicates the value we attribute to artificial pneumothorax in the treatment of pulmonary tuberculosis.

TABLE III.—AN ANALYSIS OF CASES IN WHICH ARTIFICIAL PNEUMOTHORAX WAS INDUCED IMMEDIATELY BEFORE ADMISSION.

	Sputum before induction of Pneumothorax		Sputum on Discharge	
Cases in which we advised immediate induction of the Pneumothorax during the waiting period for admission ...	No Sputum or T.B. Negative	T.B. Positive	No Sputum or T.B. Negative	T.B. Positive
Total : 47	23	24	38	9

We advised induction of the pneumothorax during the waiting period for admission in 51 cases, as compared with 39 last year. In 4 cases treatment was abandoned before admission and the results with reference to sputum in the remaining 47 cases are tabulated above.

SANOCRYSIN

The after-history of the 243 cases who had gold treatment in previous years has been followed up. Fifty-seven are now dead, and of the remaining 186 it is known that 58 have no sputum and 37 have T.B. Negative sputum.

During the year under review 58 cases have been treated with Sanocrysin : and the following table indicates a comparison of the results of sputum examination on admission and discharge.

Group	On Admission			On Discharge		
	No Sputum	T.B. Negative	T.B. Positive	No Sputum	T.B. Negative	T.B. Positive
I	—	1	2	—	—	3
II	8	5	31	14	14	16
III ...	1	2	8	3	2	6
Total ...	9	8	41	17	16	25

Sanocrysin has again been fairly extensively used—though we cannot present any definite statistical proof of its value. The proportion of cases which have a positive sputum converted to a negative one during sanocrysin treatment is actually lower than the proportion of those under other treatments. But it must be remembered that we specially select for gold therapy some of the more chronic positive cases, particularly choosing cases with scattered fibrotic lesions, cases with an Artificial Pneumothorax which have some disease on the opposite side, and cases which have recently undergone Thoracoplasties.

As regards technique, we favour small dosage, commencing with 0.05 gram and giving 0.1 gram one week later. This dose is continued for 3 weeks, and, if no reactions have occurred, 0.2 gram is given weekly, until a male patient has had 5 grams in all and a female 4 grams.

The urine is tested the day before and the day after each injection.

One ounce of 50% glucose is given one hour before each injection and one ounce after breakfast and after lunch next day.

It is very interesting and instructive to note that on the above routine of small dosage plus glucose it was only necessary to cease the gold treatment in one case who developed dermatitis.

REPORT OF THE SURGICAL DEPARTMENT

Much valuable work has been done in the theatre during the year. Ninety-five major operations, as compared with 42 last year, have been performed, and numerous refills and pleural irrigations, as well as post-operative draining, have also been carried out.

As regards equipment, numerous small instruments necessary for various procedures have been purchased and all apparatus has been brought completely up-to-date.

The 95 major operations are divided into the following groups :—

Thoracoplasty	25 operations on 12 cases.
Phrenic Evulsion	25
Phrenic Crush	16
Other Operations ...	8

The above totals are from actual cases operated upon in the theatre from July, 1936, to June, 1937, whereas the following tables will only show the results in those cases discharged from the Sanatorium during that period.

It is apparent that a smaller proportion of Phrenic Crush operations has been carried out this year. We have found that after Phrenic Crush the diaphragm will move normally if a deep breath is taken, and this, in our opinion, militates against its use in all but those cases in which it still remains doubtful whether a phrenic is going to be of permanent value.

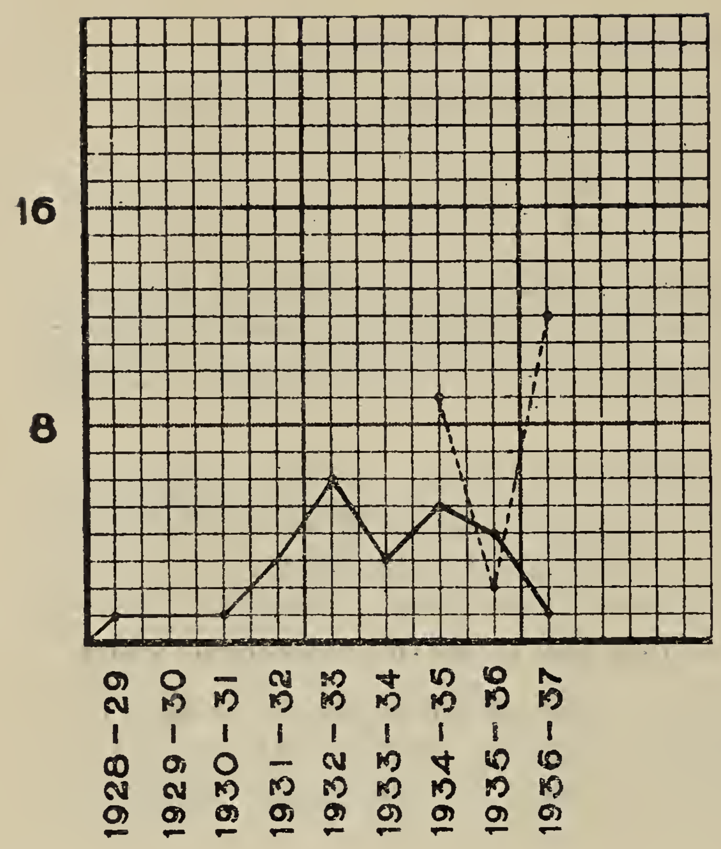
Phrenic Evulsion has been performed (*a*) in order to help collapse the lung in cases in which we were unable to divide adhesions and (2) in obliterating Pneumothoraces to allow the lung to re-expand with the minimum of damage.

We are not convinced that Phrenic Evulsion before upper Thoracoplasty is dangerous and leads to an increased risk of spread of infection to the base. We have watched cases of Phrenic Crush in which the nerve, except in deep breathing, was still paralysed, who have had the operation of upper Thoracoplasty performed without spread to the base. There can be little difference between these cases and those with a Phrenic Evulsion.

The following table shows the results as regards sedimentation rate and sputum examination in Phrenic cases discharged during the year :—

PHRENIC OPERATIONS.

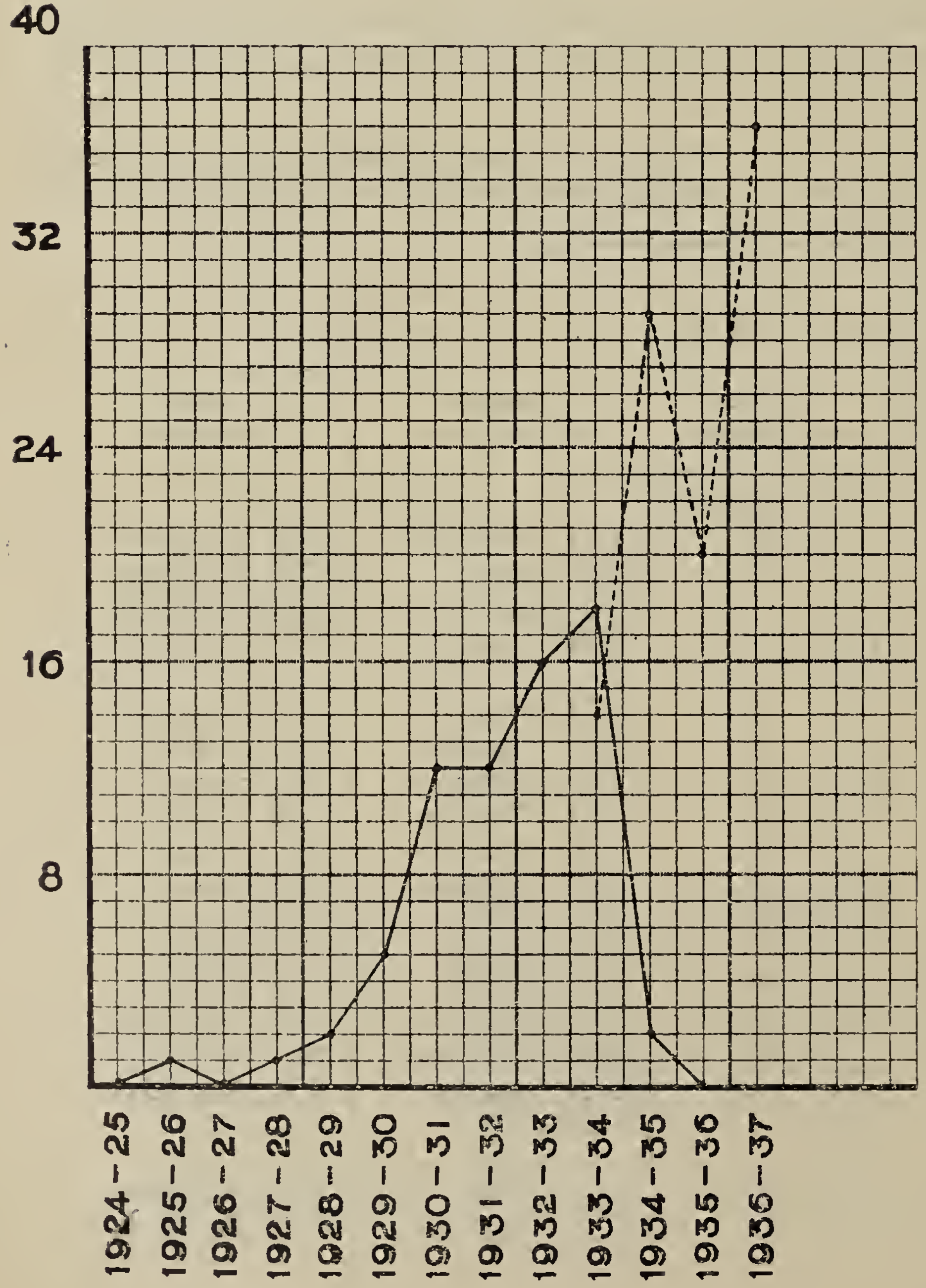
Group	Blood Sedimentation Rate		Sputum	
	Before Operation	After Operation	Before Operation	After Operation
	Per cent.	Per cent.		
I	12	8	T.B. Positive	T.B. Positive
I	5	2	No Sputum	T.B. Negative
I	12	3	No Sputum	T.B. Negative
I	28	11	T.B. Positive	T.B. Positive
II	40	40	T.B. Positive	T.B. Positive
II	6	4	T.B. Positive	T.B. Positive
II	20	5	T.B. Negative	No Sputum
II	15	3	T.B. Positive	T.B. Negative
II	29	15	T.B. Positive	No Sputum
II	24	14	T.B. Positive	T.B. Positive
II	35	8	T.B. Positive	T.B. Negative
II	5	5	No Sputum	No Sputum
II	14	6	T.B. Positive	T.B. Positive
II	19	10	T.B. Positive	T.B. Positive
II	33	27	T.B. Negative	No Sputum
II	7	4	T.B. Positive	T.B. Negative
II	13	5	No Sputum	No Sputum
III	48	20	T.B. Positive	T.B. Negative
III	20	14	T.B. Positive	T.B. Positive



THORACOPLASTY OPERATIONS

Operations in the Sanatorium ---------

Case discharged for operation ———



PHRENIC OPERATIONS

Operations in the Sanatorium ----------

Cases discharged for operation. ———

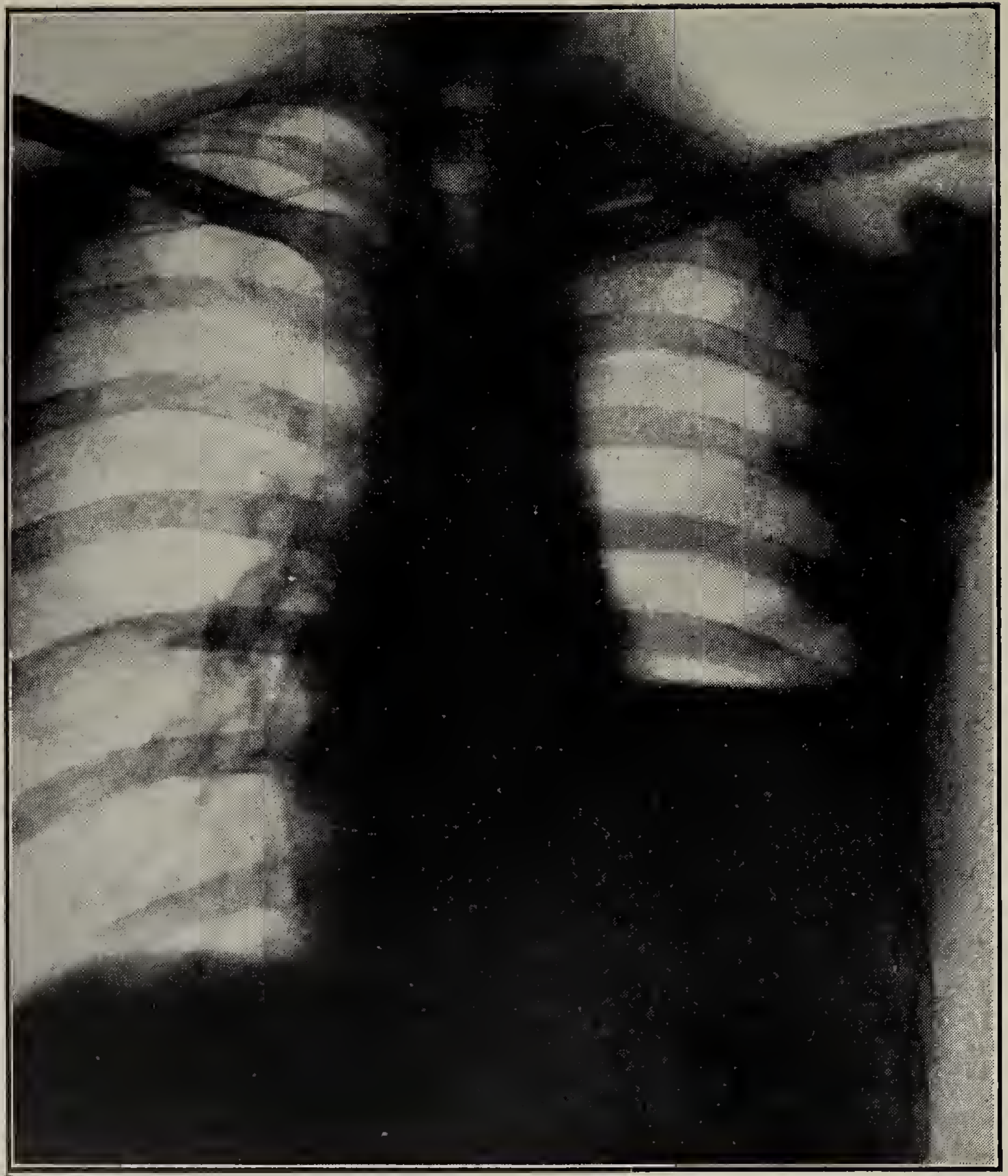


FIG. 1—BEFORE THORACOPLASTY

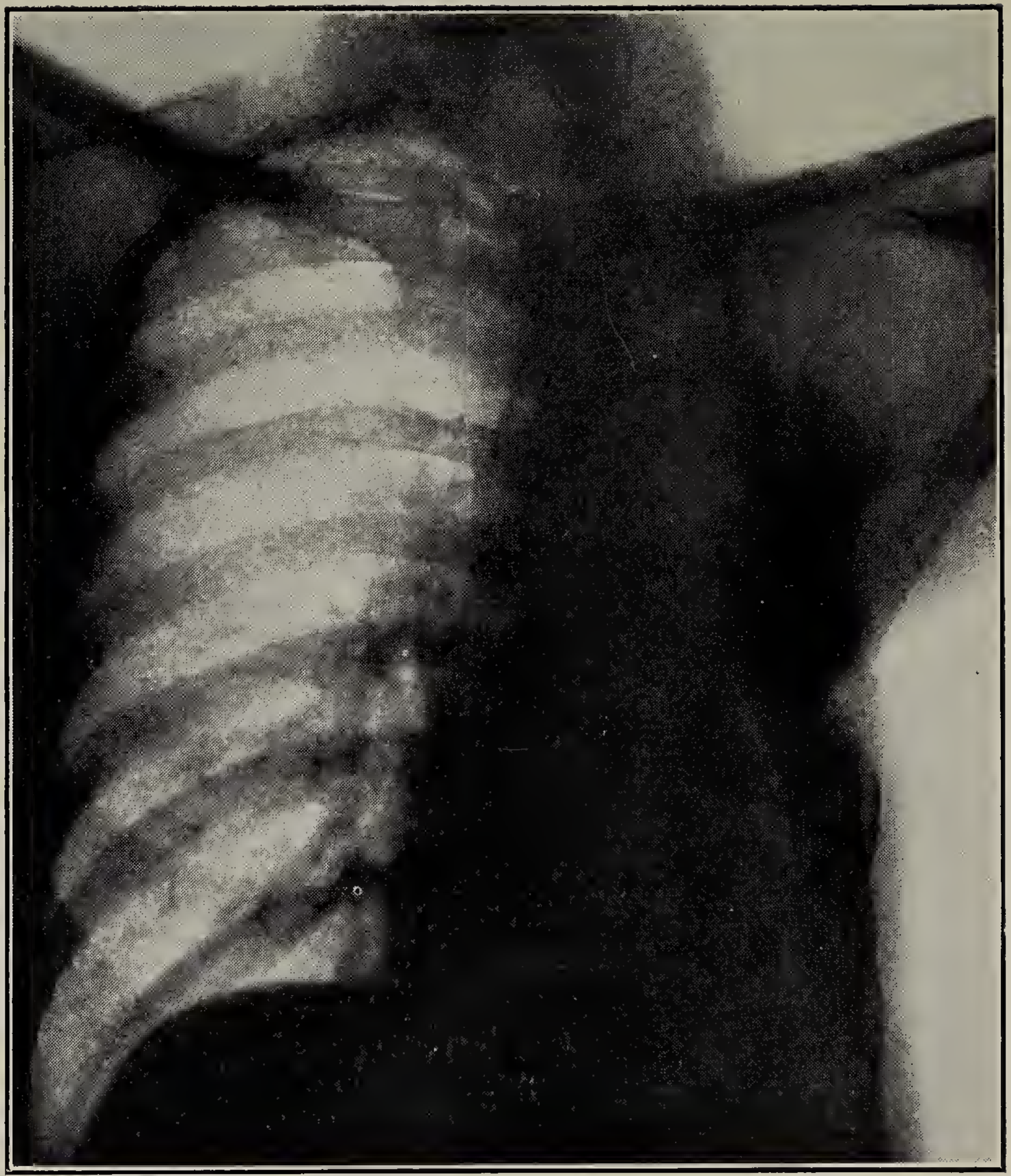


FIG. 2.—AFTER COMPLETED THORACOPLASTY

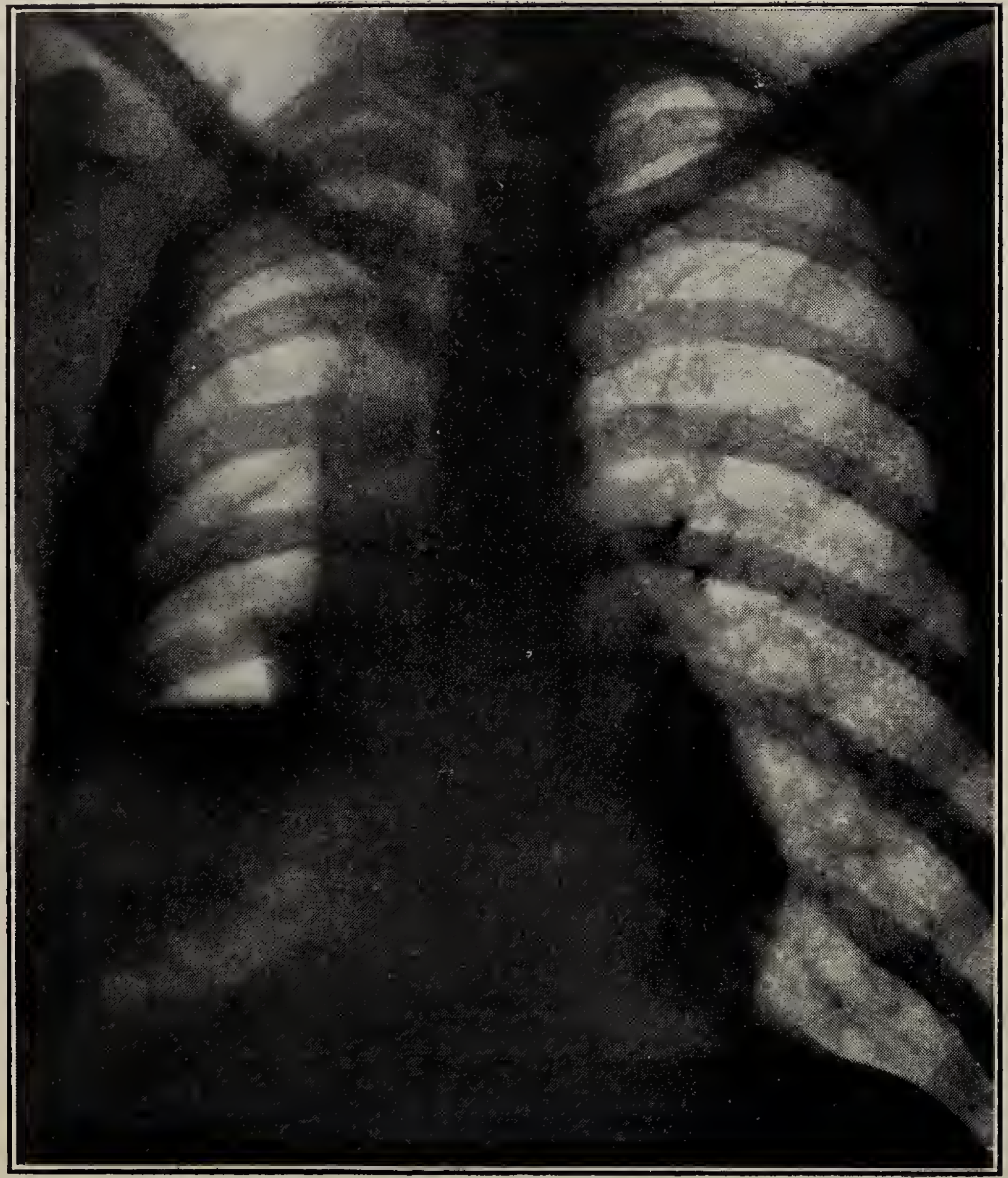


Fig. 3—Before Thoracoplasty

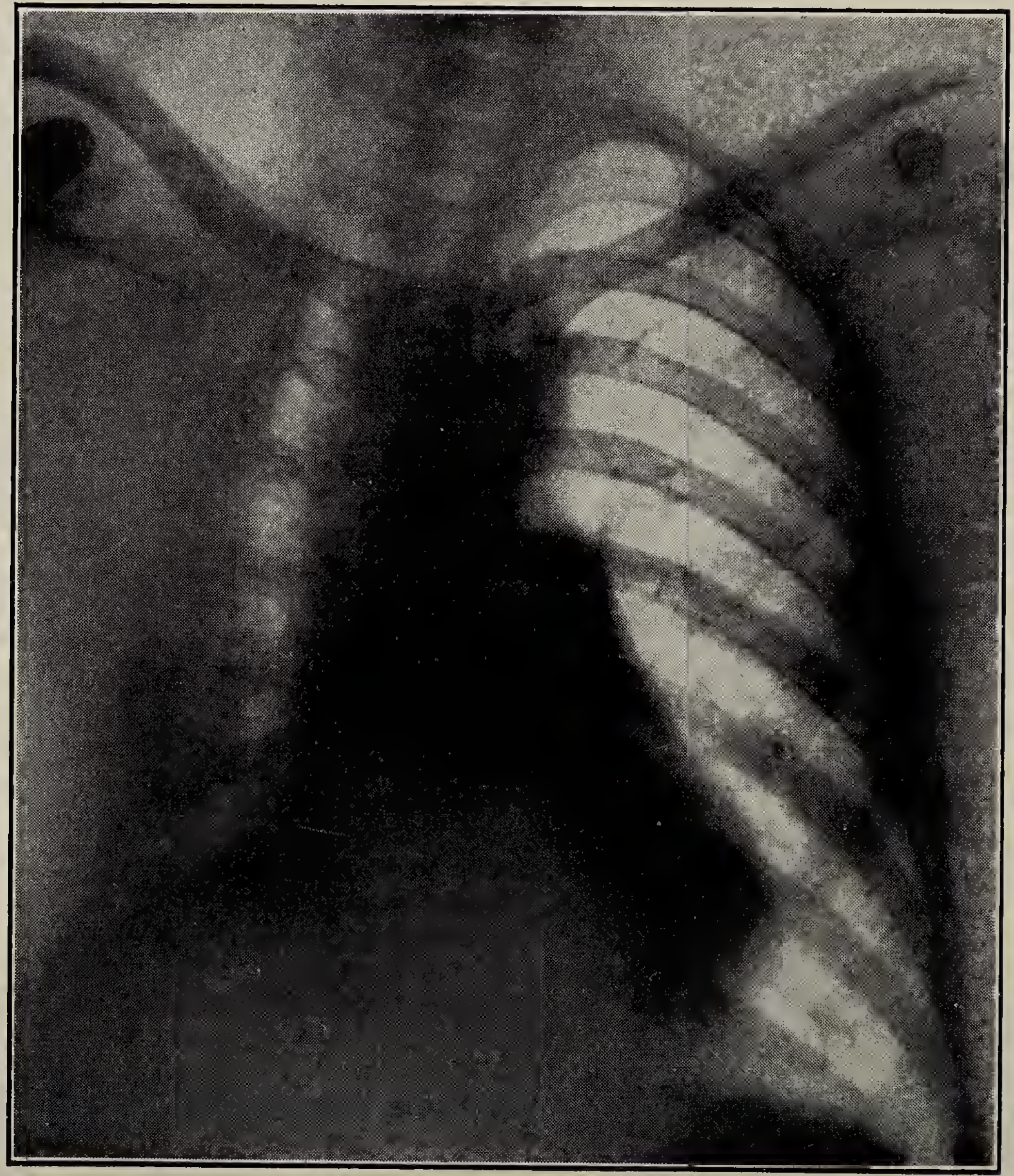


Fig. 4—After Completed Thoracoplasty

Thoracoplasty Operations.

Group	Blood Sedimentation Rate		Sputum		Working Capacity	
	Before Operation	After Operation	Before Operation	After Operation	Before Operation	After Operation
II ...	5	2	T.B. Negative	No Sputum	Bed	Full-time work
II ...	15	54	T.B. Positive	T.B. Positive	Bed	(Died)
II ...	35	4	T.B. Positive	T.B. Negative	Bed	Normal life
II ...	35	4	No Sputum	No Sputum	Bed	Up and about
II ...	40	4	T.B. Positive	No Sputum	Bed	Normal life
II ...	23	8	T.B. Positive	T.B. Positive	Up to tea	Full-time work
II ...	32	11	T.B. Positive	T.B. Positive	Bed	Full-time work
II ...	27	2	No Sputum	No Sputum	Bed	Full-time work
II ...	8	2	T.B. Positive	T.B. Negative	Full-time work	Full-time work

This year the Thoracoplasty table has been enlarged to show, not only blood sedimentation rate and sputum results before and after operation, but, capacity for work. Of the 10 cases discharged during the year, 8 have returned to full-time work or are leading normal lives if there is no necessity for them to earn their living. This is a very gratifying result, and proves the great value of the operation in cases in which other forms of collapse therapy were of no avail.

It is in the healing of tuberculous Pyo-pneumothoraces, however, that we have found Thoracoplasty treatment invaluable. These cases are given a preliminary course of pleural irrigation at weekly intervals by the two needle, closed method, commencing with normal saline. If there is no reaction, saline is followed by eusol after 3 weeks, and continued until the patient is ready to proceed to Thoracoplasty. The object of the preliminary wash-out treatment is to re-expand the lung as far as possible so that the resulting Thorocoplasty will obliterate the residual fluid space. It is necessary to continue the irrigation for some time after the operation to get this closed result.

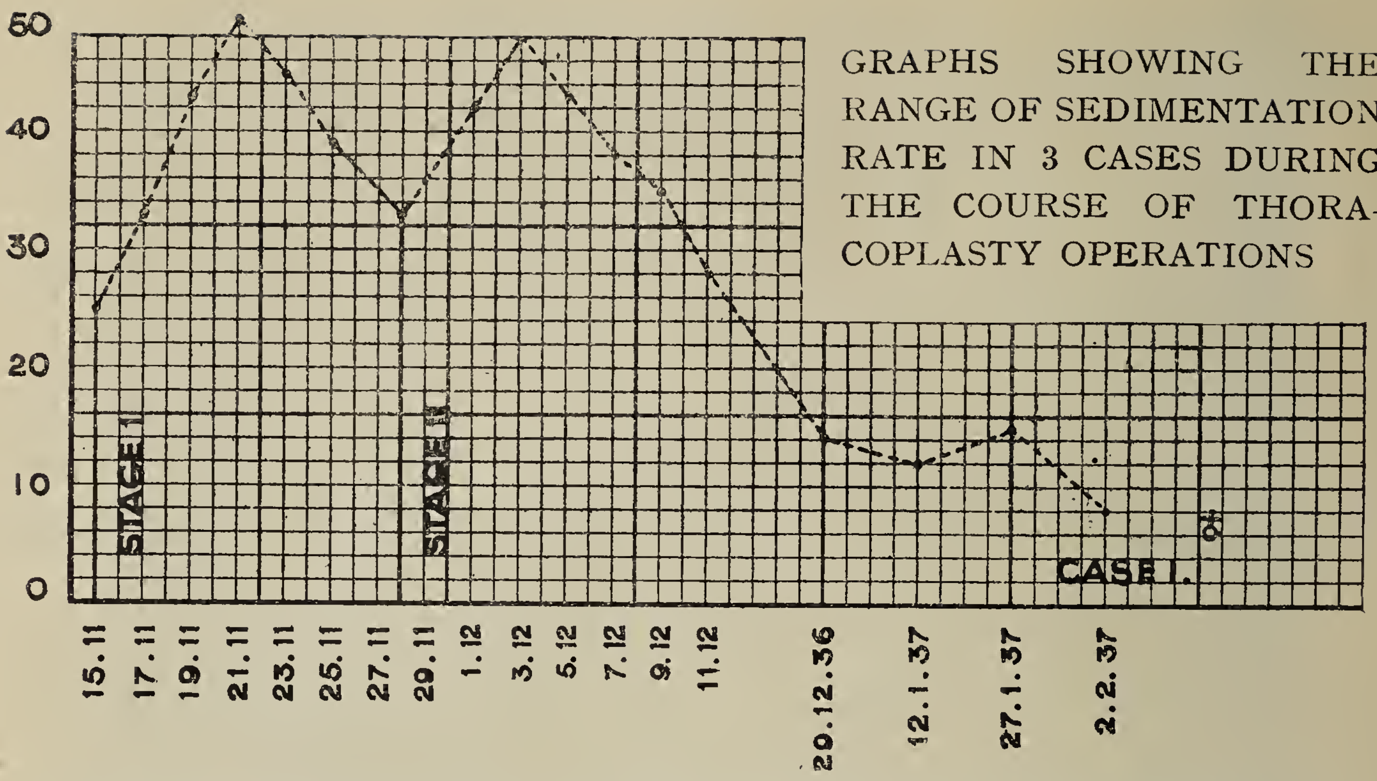
X-ray pictures of 2 cases in which this course of treatment was followed are shown. An early film and the final picture of each case have been selected. When one considers the prognosis of tuberculous Pyo-pneumothorax in the not so distant past, Thoracoplasty has certainly revolutionised the outlook and results.

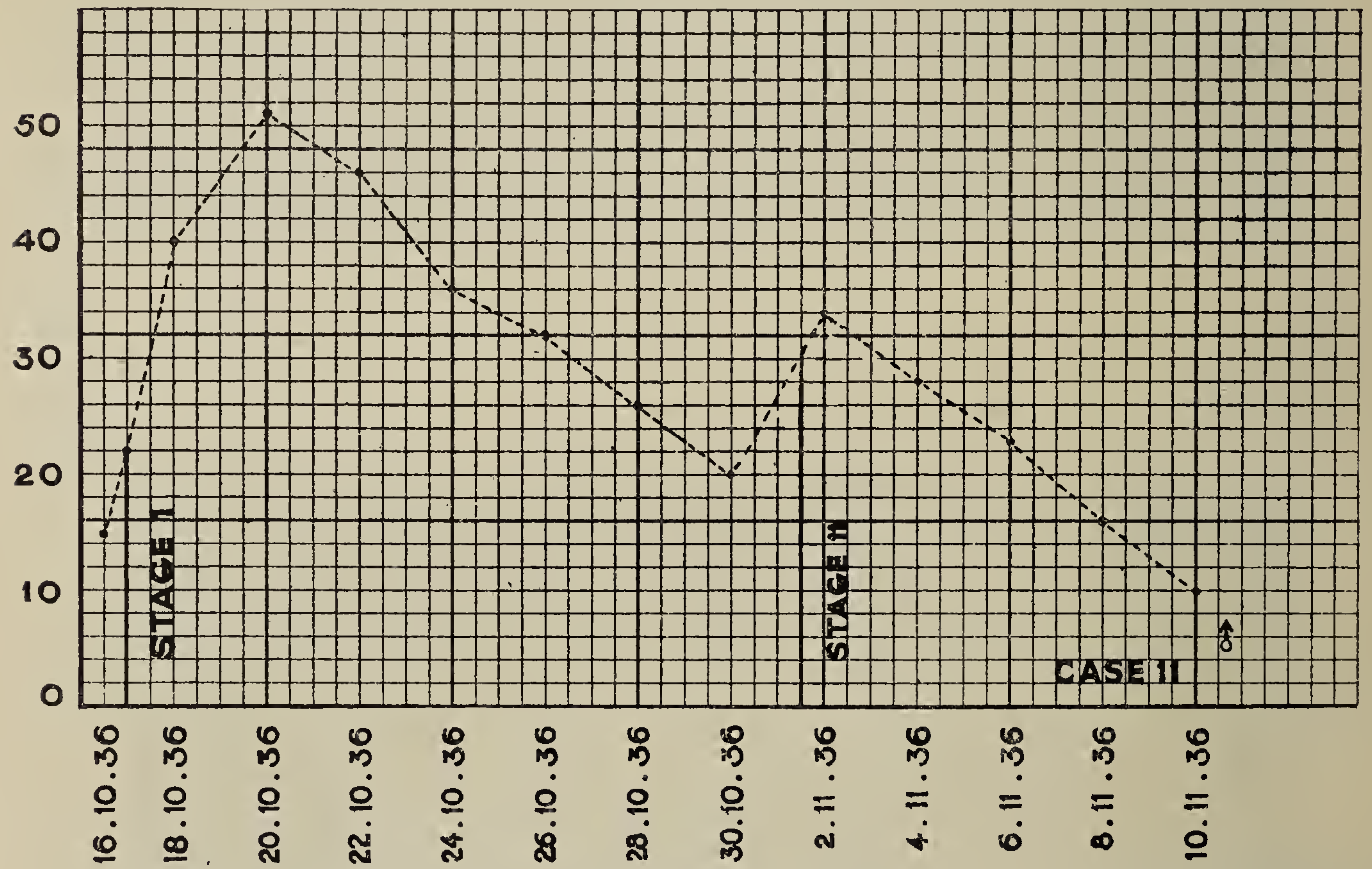
We have sometimes combined upper stage Thoracoplasty with a lower Artificial Pneumothorax in cases with a large thick-walled apical cavity which would not be collapsed by cauterisation. It is important to keep up the lower pneumothorax, not only during the operative procedure, but, afterwards. We consider it unnecessary to abandon a lower Artificial Pneumothorax in order to perform an upper Thoracoplasty. After each stage of the upper Thoracoplasty, a transitory effusion will develop in the lower Pneumothorax, but, if this is gas-replaced immediately, no damage will be done to the pleura and the Artificial Pneumothorax will not tend to obliterate. It is very rare to have to gas replace more than twice following the operation.

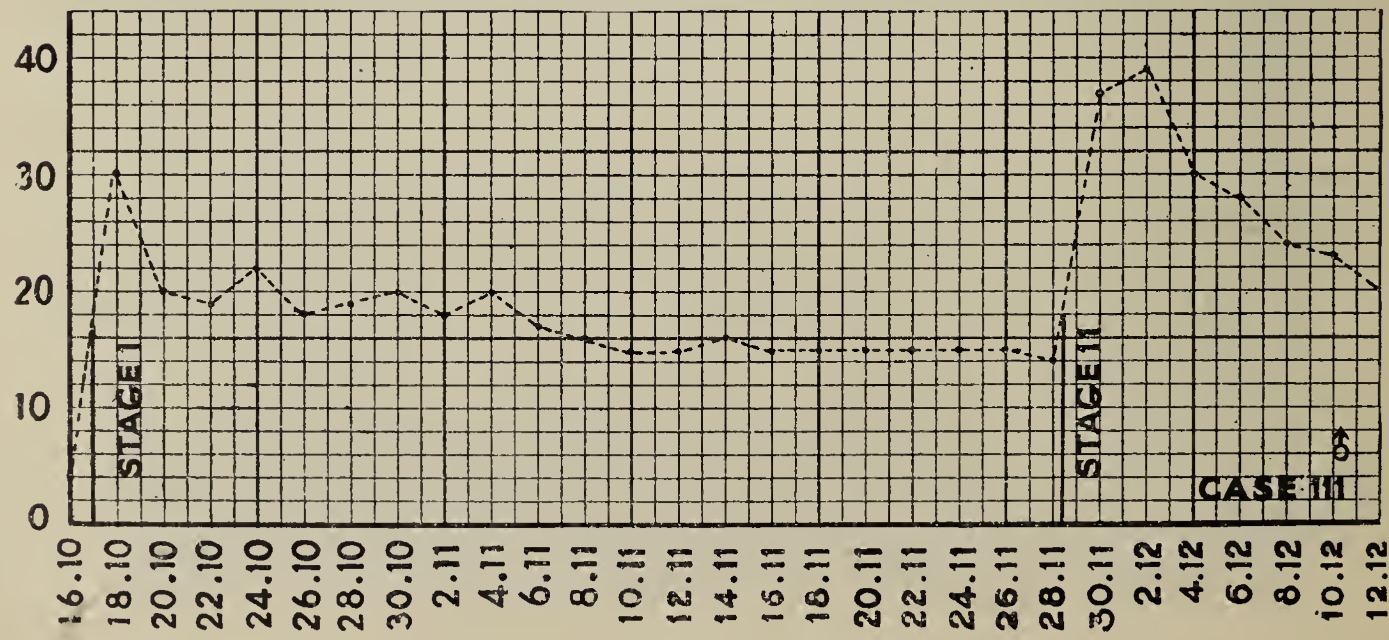
Since the period under review in the report, a number of Extra-pleural Pneumothoraces have been done in place of upper Thoracoplasties in such cases as described above and these will be discussed in the next report.

This year we enclose a graph showing the increase in cases surgically treated at Midhurst.

GRAPHS SHOWING THE RANGE OF SEDIMENTATION RATE IN 3 CASES DURING THE COURSE OF THORACOPLASTY OPERATIONS







REPORT OF THE X-RAY DEPARTMENT

The installation of a Victor Portable Unit has proved a valuable addition to our X-ray apparatus. This unit is in constant use on post-operative and other emergency cases.

A tomograph has also been successfully planned and built on the premises, and we hope to have a series of interesting cases to report next year.

Our records again show a weekly average of about 40 pictures, as a standard routine has been adopted whereby each case is X-rayed on admission, one month later, and then every six weeks until discharge. We continue our system of weekly screening in all pneumothorax cases.

The importance of serial X-rays in the treatment of pulmonary tuberculosis cannot be too strongly urged, as the adoption of this method has often enabled us to discover a spread in a lung which was quite silent clinically, the patient having normal temperature and blood sedimentation rate and feeling in no way indisposed.

REPORT OF THE DENTAL DEPARTMENT

The following dental treatment has been carried out during the year :—

Fillings	145
Extractions	104
Scalings and Gum Treatment	23
Root Treatments	5
X-rays	2
Dentures	14
Repairing Dentures	7

REPORT OF THE PATHOLOGICAL DEPARTMENT

The following routine examinations were carried out during the year ending 30th June, 1937 :—

Sedimentation Rates	1,684
Sputum Examinations	1,546
Urine Examinations	1,207
Pleural Effusions	158
Milk Examinations	59
Water Examinations	16
Throat Swabs	20
Examination of Fæces	18
Blood Counts	141
Van Bonsdorff Counts	64
Miscellaneous	57
	4,970

It will be seen from the above figures that a large number of Sedimentation Rates have again been performed, at regular intervals, on each patient during the past year. Capillary blood obtained by thumb-prick has been used and set up in 100 millimetre columns, which are kept at 37 degrees Centigrade and read after half an hour.

A table is given below, showing readings obtained from those members of the Staff who have been shown by radiological examination to be free from active pulmonary tuberculosis.

Sedimentation Rate	Men	Women	Both Sexes
1 mm.	8 or 21.0%	4 or 7.7%	12 or 13.3%
2 mm.	15 or 39.5%	3 or 5.7%	18 or 20.0%
3 mm.	11 or 29.0%	12 or 23.1%	23 or 25.5%
4 mm.	1 or 2.6%	9 or 17.1%	10 or 11.1%
5 mm.	2 or 5.2%	3 or 5.7%	5 or 5.5%
6 mm.	1 or 2.6%	5 or 9.6%	6 or 6.6%
7 mm.	—	5 or 9.6%	5 or 5.5%
8 mm.	—	5 or 9.6%	5 or 5.5%
9 mm.	—	1 or 1.9%	1 or 1.1%
10 mm.	—	2 or 3.8%	2 or 2.2%
11–15 mm.	—	3 or 5.7%	3 or 3.3%
	38 Cases	52 Cases	90 Cases

This small series would suggest that the normal rate for a man is between 1 mm. and 3 mm. Unfortunately, it seems impossible to be so definite about the normal reading for women (the majority of the rates given are from girls of 15–17 years). We regard anything below 9 mm. as normal.

It is still thought that the test is of value in assessing the progress of cases. It can be said that a normal Sedimentation Rate does not occur in the presence of active Tuberculosis, although the converse does not seem to hold. The onset of menstruation in a few cases, boils, whitlows and, especially tonsillitis cause an increase in the rate. After an initial rise during an attack of Tonsillitis it may be 3 months before the rate returns to normal, even in a non-tuberculous person.

The most dramatic rises, however, have occurred at the onset of an effusion into an Artificial Pneumothorax, the reading obtained being usually in the region of 50 millimetres in 30 minutes. In one such case a Von Bonsdorff count was taken, together with a routine Sedimentation Rate two days before the sudden onset of fluid. It was found that the count had dropped considerably (196–152) while the Sedimentation Rate was as yet unaffected. Apart from this one case, it was not felt that the Von Bonsdorff counts and Lymphocyte/Monocyte ratios gave any information which could not be deduced from clinical and radiological findings.

All those cases which have had Thoracoplasty performed in the Sanatorium have had their Sedimentation Rates determined on alternate days following each stage of the operation. From these results it was noted that a peak occurs on the 4th–6th day following each stage. In Cases I and II the second stage was performed 14 days after the first, but in Case III a delay occurred owing to collapse of the base on the affected side.

A series of 600 cultures of the Tubercle Bacillus has been undertaken. The materials for cultivation were Sputa, Pleural Effusions, Urines and Swabs of Pus from Sinuses. The medium used was Jensen's Modification of Loewenstein.

All sputa which have been passed as negative to microscopical examination have been cultured as a routine measure. This has proved of great value, although it should be emphasised that cultural experiments lead to great loss of time and trouble unless the specimen has first undergone a careful microscopical search. It should be stated here that trial was made of the method of counterstaining with 1% Picric Acid instead of the conventional Methylene Blue of the Ziehl-Neelson method and also of the Dilution-Flotation experiments with hydrocarbon oils, but it was felt that they did not supersede the careful examination of a series of films made in the ordinary way from selected pieces of the specimen.

During this series an attempt has been made to assess the efficiency of some of the different methods of destroying the secondary contaminating organisms.

The methods investigated were :—

(1) Digestion by Trypsin, then treatment by 4% Sodium Hydroxide and subsequent neutralisation by normal Hydrochloric Acid.

(2) Treatment by 6% Sulphuric Acid and then neutralisation by normal Sodium Hydroxide.

(3) Treatment by 5% Oxalic Acid without final neutralisation.

(4) Preliminary treatment with N/1 Sodium Hydroxide and then with an excess of N/1 Oxalic Acid.

The ideal method is one in which positive sputa give positive cultures every time ; there are never secondary contaminating organisms, the minimum of manipulation is necessary, and the final product for inoculation on to the medium permits of easy, thin spreading.

Experience showed that treatment by Oxalic Acid gave the best results in the first two of the above criteria, but, if Sodium Hydroxide was used before this as in method 4, a sediment was obtained which was eminently " workable."

The sputum is received in 2 oz. screw-capped bottles and 2 ml. of N/1 Sodium Hydroxide added from a burette, the cap replaced and the bottle shaken vigorously until a homogeneous mixture is obtained. To this, 4 ml. of N/1 Oxalic Acid are added and, after a thorough shake, the whole is kept at 37 degrees Centigrade for 15–20 minutes. About 10–15 ml. of this mixture are then placed in a tube and centrifuged at 6,000 revolutions per minute for 15 minutes. The supernatant fluid is removed and the deposit inoculated thinly on to at least two bottles of media.

Swabs carrying pus from sinuses are placed in an excess of N/1 Oxalic Acid for 15–20 minutes at 37 degrees Centigrade and then rubbed directly on to the surface of the medium. In culturing urines for tubercle bacilli, successive quantities of the specimen are centrifuged at 6,000 revolutions per minute in the same tube until about 2 ml. of deposit have been obtained.

This deposit is then shaken well with an excess of Oxalic Acid and kept at 37 degrees Centigrade for 15 minutes, after which it is again centrifuged and spread on the surface of the medium. It will be noted that this acid deposit turns the surface of the medium an intense brilliant green, but after about 24 hours' inoculation the colour has returned to the normal pale green.

Pleural effusions are simply centrifuged at 6,000 revolutions per minute for 15 minutes and then the sediment is inoculated. The figures seem to show that all those effusions which complicate Artificial Pneumothorax contain Tubercle Bacilli, although few of them go on to Pyo-pneumothorax. During the past year there has been opportunity to examine pleural effusions complicating Artificial Pneumothoraces from 35 patients. In 11 (or 31.4) of these, Tubercle Bacilli were found on direct microscopical examination, and they also gave positive cultures. From the remaining 24, positive cultures were obtained in 21 cases (although microscopical examination of a centrifuged and concentrated sediment of the effusion was negative) so that, in all, Tubercle Bacilli were demonstrated in 32 out of the 35 cases or in 91%

REPORT OF THE STATISTICAL DEPARTMENT

The work of the Statistical Department has been carried out on the same lines as in previous years.

The number of patients discharged from the Sanatorium up to date is 6,835. This number does not include Group IV cases, readmissions, or patients who were in residence too short a time to be included in the records. Those about whom information could not be obtained number 259 or 3.7 per cent.

The statistics of the ultimate results of the enquiry are shown in the following tables :—

TABLE A1.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were demonstrated in the Sanatorium

All cases considered together

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	125	314	56	42	38	47	46	42	42	38	39	34	36	34	34	33	31	30	30	29	29	28	28	26	26	25	25	23	98	4
1907/08	206	390	94	71	72	70	70	75	72	63	59	58	54	54	55	52	50	46	44	44	42	41	41	40	40	40	40	39	161	6
1908/09	205	264	93	70	64	55	64	67	62	60	56	55	52	48	48	47	45	45	43	42	41	41	39	39	38	38	36	36	164	5
1909/10	192	138	112	90	75	69	73	71	69	60	61	56	53	51	49	48	47	43	42	39	37	36	35	34	34	33	33	33	153	6
1910/11	197	—	133	92	88	74	73	72	69	61	56	48	47	47	44	39	38	36	35	32	31	29	29	29	25	22	22	22	168	7
1911/12	198	—	—	111	95	81	76	72	68	55	54	50	46	44	43	40	34	33	32	31	31	31	30	28	28	27	27	25	162	11
1912/13	160	—	—	—	113	94	78	75	167	49	52	49	48	45	42	40	35	35	33	33	33	32	29	29	29	29	29	27	131	2
1913/14	177	—	—	—	—	118	84	86	82	75	75	68	60	55	49	47	46	43	43	38	37	37	37	35	35	30	28	25	145	7
1914/15	193	—	—	—	—	—	123	117	104	83	83	75	71	68	61	61	55	53	49	45	44	42	41	40	39	38	34	31	158	4
1915/16	154	—	—	—	—	—	—	105	93	68	65	57	51	48	41	38	35	35	33	30	29	28	26	26	25	23	21	20	129	5
1916/17	212	—	—	—	—	—	—	—	166	127	116	105	99	89	79	79	74	73	69	67	65	64	63	60	57	53	51	50	157	5
1917/18	184	—	—	—	—	—	—	—	—	118	115	95	82	80	69	70	62	64	62	58	54	52	51	50	48	48	47	46	130	8
1918/19	198	—	—	—	—	—	—	—	—	—	165	136	121	112	102	99	92	86	84	81	79	78	74	71	68	65	60	60	129	9
1919/20	196	—	—	—	—	—	—	—	—	—	—	165	140	126	110	100	91	85	81	74	72	70	68	62	61	61	60	57	134	5
1920/21	197	—	—	—	—	—	—	—	—	—	—	—	156	141	116	96	89	81	74	73	73	70	69	65	64	62	60	59	133	5
1921/22	176	—	—	—	—	—	—	—	—	—	—	—	—	150	127	111	92	76	69	62	53	51	51	49	47	45	42	39	134	3
1922/23	165	—	—	—	—	—	—	—	—	—	—	—	—	—	135	114	100	89	80	74	67	63	60	54	52	49	47	43	121	1
1923/24	166	—	—	—	—	—	—	—	—	—	—	—	—	—	—	124	112	99	91	81	73	65	63	59	53	49	46	42	121	3
1924/25	128	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	106	90	79	72	66	60	52	49	46	44	42	41	84	3
1925/26	114	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	97	89	80	73	67	62	61	53	48	46	44	67	3
1926/27	127	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	115	109	101	96	89	84	76	75	74	70	53	4
1927/28	121	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	103	94	84	79	74	68	62	59	56	61	4
1928/29	118	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	104	90	81	70	69	66	63	61	53	4
1929/30	155	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	136	124	112	103	94	88	83	70	2
1930/31	134	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	124	118	104	89	81	76	52	6
1931/32	125	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	116	97	86	81	78	44	3
1932/33	141	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	119	112	101	98	38	5
1933/34	100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	76	68	30	2
1934/35	118	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	91	27	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	102	13	—

TABLE A2.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were *demonstrated in the Sanatorium*
Group I considered separately

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																										Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	30	91	20	15	14	17	17	19	18	16	18	14	15	14	14	14	13	12	12	12	12	12	12	12	12	12	12	11	17	2
1907/08	45	118	31	27	28	30	29	32	32	27	28	27	25	26	26	24	24	24	23	23	22	22	22	22	22	22	22	20	23	2
1908/09	28	49	20	16	16	12	15	15	15	15	14	14	14	13	13	13	13	14	14	14	14	14	14	14	14	14	13	13	15	—
1909/10	43	39	37	34	27	25	29	30	30	25	27	25	25	23	22	22	21	19	19	17	16	16	16	15	15	14	14	14	25	4
1910/11	45	—	41	47	31	28	30	29	30	28	25	22	22	22	20	17	17	17	15	13	13	12	12	13	10	8	8	8	35	2
1911/12	33	—	—	27	21	20	20	20	19	15	16	13	13	12	12	12	10	10	10	10	10	10	10	10	10	9	9	9	22	2
1912/13	15	—	—	—	14	14	12	11	10	9	7	8	8	8	8	8	6	6	6	6	6	6	6	6	6	6	6	6	9	—
1913/14	19	—	—	—	—	17	14	16	17	14	15	13	10	11	11	10	10	10	9	8	8	8	8	7	7	7	7	7	10	2
1914/15	20	—	—	—	—	—	16	17	16	12	13	11	12	12	12	12	10	10	9	9	9	8	8	7	7	7	7	6	12	2
1915/16	16	—	—	—	—	—	—	15	14	11	13	12	11	11	11	11	11	11	11	10	9	8	8	8	8	7	5	5	8	3
1916/17	24	—	—	—	—	—	—	—	24	22	23	22	22	22	20	20	19	18	16	17	17	16	15	14	14	13	12	12	11	1
1917/18	15	—	—	—	—	—	—	—	—	12	14	12	11	11	11	12	12	12	12	11	10	8	8	8	7	7	7	7	7	1
1918/19	10	—	—	—	—	—	—	—	—	—	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	1	1
1919/20	29	—	—	—	—	—	—	—	—	—	—	29	27	25	26	24	22	20	20	20	20	20	20	18	17	17	16	16	12	1
1920/21	45	—	—	—	—	—	—	—	—	—	—	—	42	30	38	34	34	32	30	29	29	29	28	28	28	27	26	26	17	2
1921/22	25	—	—	—	—	—	—	—	—	—	—	—	—	25	23	22	21	21	19	18	15	15	15	15	14	13	12	12	13	—
1922/23	29	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28	27	25	24	22	21	19	19	18	17	16	16	15	14	—
1923/24	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21	20	19	18	18	17	17	17	17	16	15	14	14	7	1
1924/25	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	13	12	11	10	10	10	10	10	9	9	9	4	2
1925/26	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	11	10	10	8	8	9	8	8	7	7	3	1
1926/27	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	22	21	21	20	19	19	19	19	19	3	—
1927/28	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	15	15	15	13	12	12	12	12	3	—
1928/29	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	12	12	11	9	9	9	8	4	1
1929/30	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33	32	31	29	28	27	27	5	1
1930/31	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	17	17	14	13	13	4	1
1931/32	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	8	8	8	8	2	—
1932/33	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	13	13	13	—	—
1933/34	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	11	11	—	1
1934/35	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	9	1	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	—

TABLE A3.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were *demonstrated in the Sanatorium*

Group II considered separately

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	57	172	31	22	18	24	23	18	19	18	17	17	17	17	17	16	15	15	15	14	14	13	13	12	12	12	12	11	44	2
1907/08	85	176	47	32	32	31	33	35	32	28	24	25	24	23	24	23	22	19	18	18	17	16	16	15	15	15	15	15	67	3
1908/09	94	141	48	34	37	32	38	40	36	34	34	33	31	31	31	31	29	28	26	25	24	24	22	23	22	22	22	22	68	4
1909/10	99	69	59	44	38	36	36	33	32	28	26	26	24	25	25	24	25	23	22	21	21	20	19	19	19	19	19	19	78	2
1910/11	100	—	68	43	49	40	37	37	35	29	28	23	22	22	21	19	18	16	16	16	15	14	14	13	13	12	12	12	83	5
1911/12	110	—	—	65	59	49	43	41	38	34	33	32	29	29	28	25	22	21	21	20	20	20	19	17	17	16	16	15	88	7
1912/13	101	—	—	—	77	68	53	51	45	33	38	35	35	32	29	28	25	25	25	25	25	24	22	22	22	22	22	20	80	1
1913/14	95	—	—	—	—	74	54	55	54	51	50	47	42	40	34	32	31	28	29	26	24	24	24	23	23	19	17	14	77	4
1914/15	99	—	—	—	—	—	74	74	69	57	57	51	46	43	38	39	36	36	33	30	29	28	27	27	26	25	21	19	78	2
1915/16	71	—	—	—	—	—	—	54	49	35	33	28	24	22	17	14	12	12	12	10	10	10	9	9	8	8	8	8	62	1
1916/17	99	—	—	—	—	—	—	—	89	72	65	62	56	50	44	46	43	43	42	40	39	39	39	37	34	32	31	30	67	2
1917/18	86	—	—	—	—	—	—	—	—	63	65	54	50	48	40	41	36	38	38	36	34	34	33	32	32	32	31	31	51	4
1918/19	98	—	—	—	—	—	—	—	—	—	86	72	69	64	60	59	56	55	53	50	48	47	45	44	42	41	38	38	56	4
1919/20	69	—	—	—	—	—	—	—	—	—	—	63	55	48	46	43	42	39	35	31	30	30	29	26	26	26	26	25	43	1
1920/21	62	—	—	—	—	—	—	—	—	—	—	—	56	47	38	31	28	26	24	24	24	24	23	21	21	20	19	18	42	2
1921/22	48	—	—	—	—	—	—	—	—	—	—	—	—	43	35	31	27	23	23	19	17	15	15	15	15	15	15	14	34	—
1922/23	28	—	—	—	—	—	—	—	—	—	—	—	—	—	27	24	23	21	21	18	17	17	16	15	14	12	12	11	16	1
1923/24	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	25	22	21	17	15	14	14	14	13	11	11	10	18	1
1924/25	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52	50	43	39	35	33	28	27	25	25	24	23	35	1
1925/26	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	40	38	35	33	31	31	28	26	25	24	22	—
1926/27	69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	66	63	61	59	56	53	46	45	45	41	26	2
1927/28	69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	61	60	55	51	50	48	44	41	38	28	3
1928/29	86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	79	71	65	57	56	53	50	49	35	2
1929/30	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	90	84	73	68	62	58	54	48	1
1930/31	99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93	91	80	71	65	60	34	5
1931/32	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	73	65	61	58	22	2
1932/33	92	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	86	81	71	70	18	4
1933/34	45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	36	33	11	1
1934/35	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55	49	10	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	69	4	—

TABLE A4.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were *demonstrated in the Sanatorium*

Group III considered separately

Year of Dis. charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	38	51	6	5	6	6	6	5	5	4	4	3	4	3	3	3	3	3	3	3	3	3	3	2	2	1	1	1	37	—
1907/08	76	87	18	12	12	9	8	8	8	7	7	6	5	5	5	5	4	3	3	3	3	3	3	3	3	3	3	3	72	1
1908/09	83	71	22	13	12	11	11	12	11	11	8	8	7	4	4	3	3	3	3	3	3	3	3	2	2	2	1	1	81	1
1909/10	50	25	16	12	10	8	8	8	7	6	5	4	4	3	2	2	1	1	1	1	—	—	—	—	—	—	—	—	50	—
1910/11	52	—	17	9	8	6	6	6	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	50	—
1911/12	55	—	—	19	15	12	13	11	11	5	5	5	4	3	3	4	2	2	1	1	1	1	1	1	1	1	1	1	52	2
1912/13	44	—	—	—	22	12	13	13	12	6	7	6	5	5	5	3	4	4	2	2	2	2	1	1	1	1	1	1	42	1
1913/14	63	—	—	—	—	27	16	15	11	10	10	8	7	4	4	5	5	5	5	4	5	5	5	5	5	4	4	4	58	1
1914/15	74	—	—	—	—	—	33	26	19	14	13	13	13	13	11	10	9	7	7	6	6	6	6	6	6	6	6	6	68	—
1915/16	67	—	—	—	—	—	—	36	30	22	19	17	16	15	13	13	12	12	10	10	10	10	9	9	9	8	8	7	59	1
1916/17	89	—	—	—	—	—	—	—	53	33	28	21	21	17	15	13	12	12	11	10	9	9	9	9	9	8	8	8	79	2
1917/18	83	—	—	—	—	—	—	—	—	43	36	29	21	20	18	17	14	14	12	11	10	10	10	10	9	9	9	8	72	3
1918/19	90	—	—	—	—	—	—	—	—	—	69	54	42	39	33	31	27	22	22	22	22	22	20	18	17	15	14	14	72	4
1919/20	98	—	—	—	—	—	—	—	—	—	—	73	58	53	38	33	27	26	26	23	22	20	19	18	18	18	18	16	79	3
1920/21	90	—	—	—	—	—	—	—	—	—	—	—	58	54	40	31	27	23	20	20	20	17	18	16	15	15	15	15	74	1
1921/22	103	—	—	—	—	—	—	—	—	—	—	—	—	82	69	58	44	32	27	25	21	21	28	19	18	17	15	14	87	2
1922/23	108	—	—	—	—	—	—	—	—	—	—	—	—	—	80	62	50	43	35	34	29	27	25	21	21	21	19	17	91	—
1923/24	115	—	—	—	—	—	—	—	—	—	—	—	—	—	—	77	67	58	52	46	41	34	32	28	24	23	21	18	96	1
1924/25	54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	27	24	22	21	17	14	12	11	11	10	10	44	—
1925/26	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	44	38	32	28	26	23	21	17	14	14	13	42	2
1926/27	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	24	19	16	13	12	11	11	10	10	24	2
1927/28	37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27	19	14	13	11	8	7	6	6	30	1
1928/29	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	7	4	2	4	4	4	4	14	1
1929/30	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	8	8	6	4	3	2	17	—
1930/31	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	10	7	4	3	3	14	—
1931/32	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	16	13	12	12	20	1
1932/33	36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	18	17	15	20	1
1933/34	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	34	29	24	19	—
1934/35	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	38	33	16	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	9	—

TABLE A5.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not *demonstrated in the Sanatorium*

All cases considered together

Year of Discharge.	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	24	81	18	15	14	16	18	19	21	21	19	18	18	18	18	16	17	18	18	16	14	15	16	16	15	12	11	11	8	5
1907/08	51	141	40	33	34	35	37	40	39	38	37	35	36	34	34	33	33	32	32	31	30	29	28	27	24	24	24	22	22	7
1908/09	66	102	41	33	47	40	38	40	44	43	44	44	42	43	43	43	39	37	39	40	39	38	38	36	36	33	32	32	28	6
1909/10	59	54	49	44	48	42	47	49	49	43	43	42	42	42	41	40	39	38	37	36	36	35	35	34	31	29	28	28	20	11
1910/11	48	—	42	32	38	37	40	38	37	34	34	33	31	30	32	31	31	30	30	30	30	30	28	26	26	26	25	24	19	5
1911/12	48	—	—	36	32	36	34	36	36	29	31	27	27	27	27	27	27	27	27	25	25	25	25	25	24	24	24	24	20	4
1912/13	31	—	—	—	29	28	25	28	28	24	26	25	24	25	24	23	23	23	23	22	22	22	21	20	20	20	19	19	10	2
1913/14	41	—	—	—	—	37	31	37	36	33	35	33	32	33	33	34	34	34	32	32	33	32	32	30	29	28	27	26	9	6
1914/15	35	—	—	—	—	—	28	30	29	31	24	23	20	22	22	21	20	20	21	20	20	20	20	17	18	17	17	16	13	6
1915/16	59	—	—	—	—	—	—	53	51	47	47	44	45	44	43	44	43	42	41	40	37	37	36	36	35	33	32	31	22	6
1916/17	58	—	—	—	—	—	—	—	56	53	53	47	50	47	48	48	50	49	49	47	47	47	45	44	44	43	41	41	14	3
1917/18	117	—	—	—	—	—	—	—	—	108	105	102	95	98	97	97	98	95	92	89	89	89	85	84	83	81	81	78	30	9
1918/19	119	—	—	—	—	—	—	—	—	—	115	112	109	107	104	103	102	101	99	99	96	96	92	92	87	85	84	82	26	11
1919/20	78	—	—	—	—	—	—	—	—	—	—	75	74	72	71	68	68	66	65	63	62	61	61	59	58	57	55	54	19	5
1920/21	66	—	—	—	—	—	—	—	—	—	—	—	66	66	64	64	63	61	60	62	63	63	62	61	60	55	55	54	6	6
1921/22	93	—	—	—	—	—	—	—	—	—	—	—	—	92	84	82	81	79	78	75	73	73	71	68	67	64	63	60	24	9
1922/23	51	—	—	—	—	—	—	—	—	—	—	—	—	—	46	44	44	43	40	38	36	35	35	35	34	34	34	33	17	1
1923/24	68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	63	60	59	58	56	55	53	52	52	50	50	47	17	4
1924/25	72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	71	68	66	62	62	60	60	59	59	58	58	58	10	4
1925/26	70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	67	67	65	63	61	60	59	57	54	54	53	11	6
1926/27	41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	39	39	39	39	36	36	34	34	33	31	9	1
1927/28	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	54	54	50	47	46	44	42	40	40	13	2
1928/29	53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	50	48	47	46	43	41	39	9	5
1929/30	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	33	33	33	31	30	30	29	6	—
1930/31	44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	42	38	38	37	36	7	1
1931/32	64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	62	58	57	56	55	7	2
1932/33	56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	53	54	51	51	5	—
1933/34	89	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	83	76	74	15	—
1934/35	83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	81	80	3	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	74	1	—

TABLE A6.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not *demonstrated in the Sanatorium*

Group I considered separately

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	16	58	13	10	10	11	13	13	15	15	14	13	13	14	14	13	14	14	14	12	11	12	13	13	12	10	9	9	4	3
1907/08	31	89	25	23	23	22	24	26	25	24	24	22	23	23	23	23	23	23	23	22	22	21	21	19	18	18	18	16	11	4
1908/09	39	64	27	19	31	25	23	25	28	27	28	29	27	28	28	28	26	25	26	27	26	25	25	23	23	21	20	20	14	5
19 9/10	42	39	36	32	36	30	34	35	35	32	33	32	32	32	31	31	30	30	29	28	28	27	27	26	24	22	22	22	11	9
1910/11	37	—	33	25	30	29	31	29	29	27	27	26	24	24	25	24	24	23	24	24	24	24	23	22	22	22	21	21	12	4
1911/12	26	—	—	22	22	23	20	21	21	20	20	18	18	18	18	18	18	19	19	19	19	19	19	19	19	19	19	19	7	—
1912/13	19	—	—	—	18	17	16	18	17	14	15	14	15	15	15	14	14	14	14	13	13	13	13	12	12	12	11	11	6	2
1913/14	28	—	—	—	—	26	21	28	27	25	26	25	24	25	25	26	26	26	24	24	25	25	25	23	22	21	21	21	4	3
1914/15	17	—	—	—	—	—	13	15	14	9	13	11	11	12	12	12	11	11	12	12	12	12	12	9	10	9	9	8	5	4
1915/16	32	—	—	—	—	—	—	31	32	29	29	27	28	27	27	28	29	29	29	28	26	26	26	26	25	24	23	23	6	3
1916/17	34	—	—	—	—	—	—	—	33	31	33	28	31	29	31	30	32	32	32	29	30	30	30	29	29	23	23	23	8	3
1917/18	51	—	—	—	—	—	—	—	—	47	48	46	42	44	45	45	46	46	45	44	44	44	41	41	41	41	41	41	5	5
1918/19	35	—	—	—	—	—	—	—	—	—	34	34	33	33	32	34	33	34	33	32	30	31	31	31	31	31	31	30	3	2
1919/20	50	—	—	—	—	—	—	—	—	—	—	47	48	47	45	44	43	42	41	41	41	41	41	39	39	38	37	37	10	3
1920/21	48	—	—	—	—	—	—	—	—	—	—	—	48	48	47	47	46	44	43	45	47	47	47	47	47	43	43	42	4	2
1921/22	51	—	—	—	—	—	—	—	—	—	—	—	—	50	49	48	47	46	46	46	45	45	44	42	41	39	39	38	8	5
1922/23	35	—	—	—	—	—	—	—	—	—	—	—	—	—	33	32	32	31	29	28	27	26	26	26	25	25	25	24	10	1
1923/24	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	42	40	39	39	39	38	38	37	37	35	35	33	7	3
1924/25	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	48	46	45	42	42	40	40	40	41	40	40	40	5	4
1925/26	44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	43	43	43	42	41	40	40	39	39	38	2	4
1926/27	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	24	24	24	23	24	23	23	23	21	4	—
1927/28	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	35	33	31	30	28	28	27	27	7	1
1928/29	32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32	31	30	29	27	26	25	3	4
1929/30	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	20	20	19	19	19	19	1	—
1930/31	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	20	19	19	19	19	—	1
1931/32	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	35	35	34	34	33	—	2
1932/33	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	27	26	26	1	—
1933/34	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	25	25	1	—
1934/35	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	22	—	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	1	—

TABLE A7.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not *demonstrated in the Sanatorium*

Group II considered separately

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	7	21	5	5	4	5	5	6	6	6	5	5	5	4	4	3	3	4	4	4	3	3	3	3	3	2	2	2	3	2
1907/08	18	47	13	10	11	12	13	13	13	13	12	12	12	10	10	10	10	9	9	9	8	8	7	7	6	6	6	6	10	2
1908/09	25	36	13	14	15	14	14	14	15	15	15	14	14	14	14	14	12	11	12	12	12	12	12	12	12	11	11	11	13	1
1909/10	15	13	11	10	10	11	12	12	12	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	7	7	6	6	7	2
1910/11	10	—	8	8	8	8	9	9	8	7	7	7	7	6	7	7	7	7	6	6	6	6	5	4	4	4	4	3	6	1
1911/12	20	—	—	14	9	12	13	14	14	8	10	9	8	8	8	8	8	8	8	6	6	6	6	6	5	5	5	5	11	4
1912/13	9	—	—	—	9	9	7	8	8	8	8	8	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	2	—
1913/14	11	—	—	—	—	9	9	8	8	7	8	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	5	4	4	3
1914/15	14	—	—	—	—	—	13	13	13	10	9	10	8	9	9	9	9	9	9	8	8	8	8	8	8	8	8	8	5	1
1915/16	23	—	—	—	—	—	—	19	16	15	16	15	15	15	14	14	12	12	11	11	10	10	9	9	9	7	12	11	9	3
1916/17	24	—	—	—	—	—	—	—	23	22	20	19	19	18	17	18	18	17	17	18	17	17	15	15	15	15	15	15	7	2
1917/18	59	—	—	—	—	—	—	—	—	55	51	50	48	48	47	47	47	45	43	41	41	41	40	39	39	37	39	36	21	2
1918/19	71	—	—	—	—	—	—	—	—	—	68	67	68	68	66	64	64	62	61	63	62	61	57	57	52	50	49	48	15	8
1919/20	20	—	—	—	—	—	—	—	—	—	—	20	20	20	20	18	19	19	19	18	18	17	17	17	16	16	15	14	4	2
1920/21	14	—	—	—	—	—	—	—	—	—	—	—	14	14	13	13	13	13	13	13	12	12	11	10	9	8	8	8	2	4
1921/22	28	—	—	—	—	—	—	—	—	—	—	—	—	28	26	27	27	26	25	22	21	21	20	19	19	18	18	16	8	4
1922/23	9	—	—	—	—	—	—	—	—	—	—	—	—	—	8	7	7	7	6	6	5	5	5	5	5	5	5	5	4	—
1923/24	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14	14	14	14	14	13	13	13	13	13	13	12	2	1
1924/25	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	18	17	16	16	16	16	16	15	15	15	15	3	—
1925/26	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19	19	17	15	14	14	14	13	11	11	11	7	1
1926/27	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	10	10	10	9	9	8	8	8	8	2	1
1927/28	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	17	15	14	14	14	12	11	11	6	1
1928/29	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	17	16	16	16	15	14	13	5	1
1929/30	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	12	12	11	10	10	9	5	—
1930/31	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	21	18	18	17	16	6	—
1931/32	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	22	22	21	21	6	—
1932/33	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	26	26	24	24	2	—
1933/34	40	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	37	37	3	—
1934/35	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	50	—	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43	—	—

Table A8.—Statistics of Ultimate Results

Cases in the Sputum of which T.B. were not *demonstrated in the Sanatorium*

Group III considered separately

Year of Dis-charge	Number Discharged	Number reported " Well " or " Alive " in each successive year after Discharge																											Number Dead in 1937	No. lost sight of in 1937
		1908 –11	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937		
1906/07	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—	1	—
1907/08	2	6	2	0	0	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	1	—	—	—	—	1	1
1908/09	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—
1909/10	2	2	2	2	1	1	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	—	—	—	—	2	—
1910/11	1	—	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—	1	—
1911/12	2	—	—	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	—	—	—	—	2	—
1912/13	3	—	—	—	2	2	2	2	3	2	3	3	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	—
1913/14	2	—	—	—	—	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	—	—	1	1
1914/15	4	—	—	—	—	—	2	2	2	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	—	—	—	—	3	1
1915/16	4	—	—	—	—	—	—	3	3	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	3	—
1916/17	0	—	—	—	—	—	—	—	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	—	—	—	—	—
1917/18	7	—	—	—	—	—	—	—	—	6	6	6	5	5	5	5	5	4	4	4	4	4	4	4	3	3	3	3	4	—
1918/19	13	—	—	—	—	—	—	—	—	—	13	11	8	6	6	5	5	5	5	4	4	4	4	4	4	4	4	4	8	1
1919/20	8	—	—	—	—	—	—	—	—	—	—	8	6	6	6	6	6	5	5	4	3	3	3	3	3	3	3	3	5	—
1920/21	4	—	—	—	—	—	—	—	—	—	—	—	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	—	—
1921/22	14	—	—	—	—	—	—	—	—	—	—	—	—	14	9	7	7	7	7	7	7	7	7	7	7	7	6	6	8	—
1922/23	7	—	—	—	—	—	—	—	—	—	—	—	—	—	5	5	5	5	5	4	4	4	4	4	4	4	4	4	3	—
1923/24	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	7	6	6	5	4	3	2	2	2	2	2	2	8	—
1924/25	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	4	4	4	4	4	4	3	3	3	3	3	2	—
1925/26	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	5	5	5	5	5	5	4	4	4	4	2	1
1926/27	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	5	5	5	4	3	3	3	2	2	3	—
1927/28	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	2	2	2	2	—	—
1928/29	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	1	1	—
1929/30	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	—	—
1930/31	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	1	—
1931/32	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	1	1	—
1932/33	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	2	—
1933/34	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18	14	13	10	—
1934/35	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	8	3	—
1935/36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—

Table B1.—Statistics of Ultimate Results

Cases in the Sputum of which T.B. were *demonstrated in the Sanatorium*

Condition on		Discharged during the Year																										
Admission	Discharge	1906/11	1911/12	1912/13	1913/14	1914/15	1915/16	1916/17	1917/18	1918/19	1919/20	1920/21	1921/22	1922/23	1923/24	1924/25	1925/26	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32	1932/33	1933/34	1934/35	1935/36	Condition in 1937
Group I	Disease Arrested	34	4	3	2	2	3	5	—	3	10	19	8	8	9	6	6	9	9	6	24	11	6	10	6	2	6	Alive
		38	9	5	4	6	4	7	2	—	1	3	5	9	2	2	2	1	1	2	4	2	1	—	—	—	—	Dead
		5	1	—	1	1	1	—	1	—	—	2	—	—	—	2	1	—	—	1	1	1	—	—	1	—	—	Lost sight of
	Much Improved	30	4	3	4	2	1	7	5	4	5	7	4	7	4	2	—	6	1	1	2	—	2	3	4	6	2	Alive
		59	12	3	4	5	4	2	4	1	9	12	7	5	4	—	1	1	1	—	1	—	—	—	—	—	—	Dead
		3	1	—	1	2	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Improved	2	—	—	—	—	—	—	1	1	1	—	—	—	—	1	1	4	1	1	1	1	—	—	1	1	—	Alive
		6	—	—	1	1	—	1	—	—	2	1	1	—	1	1	—	1	—	1	—	1	1	—	—	1	—	Dead
		2	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Stationary or Worse	1	1	—	1	1	1	—	1	—	—	—	—	—	1	—	—	—	1	—	—	1	—	—	—	—	—	Alive
		11	1	1	1	—	—	1	1	—	—	1	—	—	—	1	—	—	1	1	—	1	—	—	—	—	—	Dead
		—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
II	Disease Arrested	21	7	8	5	4	2	5	2	7	8	7	3	6	5	5	4	11	11	15	14	11	16	29	6	7	15	Alive
		27	13	15	9	9	5	5	3	—	1	5	4	4	5	5	1	4	5	5	5	1	3	3	—	1	1	Dead
		5	1	—	1	1	—	—	—	1	—	—	1	—	—	—	—	1	—	1	—	—	—	1	—	—	—	Lost sight of
	Much Improved	49	6	8	6	14	5	22	21	28	13	11	10	4	5	15	9	13	12	12	20	19	18	15	22	29	36	Alive
		155	38	28	41	40	31	41	31	35	34	30	22	12	12	12	4	5	8	5	6	6	6	6	2	3	1	Dead
		8	1	1	3	—	—	2	3	2	1	2	—	1	1	—	—	1	2	1	—	3	—	1	1	—	—	Lost sight of

Group	Improved	7	2	2	3	—	—	1	7	2	4	—	—	1	—	2	10	14	11	19	16	19	16	18	4	11	14	Alive
		82	16	18	9	9	13	10	8	14	6	5	7	—	1	16	8	14	7	13	23	12	6	6	6	5	2	Dead
		2	3	—	—	—	1	—	—	1	—	—	—	—	—	1	—	—	—	—	1	1	—	1	—	—	—	Lost sight of
	Stationary or Worse	2	1	2	—	2	1	2	1	1	—	—	—	—	—	1	1	3	4	3	3	11	8	8	1	2	4	Alive
		76	20	19	18	20	13	11	9	7	2	2	1	—	—	2	9	3	8	12	15	15	7	3	3	1	—	Dead
		1	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	1	2	1	—	—	—	Lost sight of
Group III	Disease Arrested	—	—	—	—	—	—	—	—	—	1	3	3	2	5	1	—	1	—	—	—	—	—	—	—	3	—	Alive
		2	2	1	1	—	1	1	—	—	2	2	5	3	3	—	—	—	1	—	—	—	1	—	—	—	—	Dead
		—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Much Improved	3	—	—	3	1	6	6	7	13	8	8	7	12	13	2	6	1	2	—	—	—	1	5	9	10	8	Alive
		58	6	6	6	19	17	27	27	34	28	28	55	54	53	9	5	2	5	2	2	—	—	1	4	2	2	Dead
		1	1	—	—	—	1	1	2	2	2	—	2	—	1	—	—	—	1	—	—	—	1	—	—	—	—	Lost sight of
	Improved	3	—	—	—	2	1	—	—	1	7	4	4	1	—	6	6	8	3	2	1	2	8	6	6	16	9	Alive
		94	13	11	10	17	13	26	21	20	30	36	22	25	31	26	26	12	10	6	5	5	7	2	5	7	3	Dead
		1	1	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Stationary or Worse	1	—	1	1	3	—	2	1	—	—	—	—	2	—	—	1	—	1	2	2	1	3	4	9	4	8	Alive
		136	32	24	41	32	28	25	24	18	19	8	5	9	9	10	11	10	14	6	9	9	12	17	10	7	4	Dead
		—	—	1	1	—	—	1	1	1	—	—	—	—	—	—	2	2	—	1	—	—	—	1	—	—	—	Lost sight of
	Summary	153	25	27	25	31	20	50	46	60	57	59	39	43	42	41	44	70	56	61	83	76	78	98	68	91	102	Alive
		744	162	131	145	158	129	157	130	129	134	133	134	121	121	84	67	53	61	53	70	52	44	38	30	27	13	Dead
		28	11	2	7	4	5	5	8	9	5	5	3	1	3	3	3	4	4	4	2	6	3	5	2	—	—	Lost sight of
	TOTAL	925	198	160	177	193	154	212	184	198	196	197	176	165	166	128	114	127	121	118	155	134	125	141	100	118	115	

TABLE B2.—STATISTICS OF ULTIMATE RESULTS

Cases in the Sputum of which T.B. were not *demonstrated in the Sanatorium*

Condition on		Discharged during the Year																										Condition in 1937
Admission	Discharge	1906/11	1911/12	1912/13	1913/14	1914/15	1915/16	1916/17	1917/18	1918/19	1919/20	1920/21	1921/22	1922/23	1923/24	1924/25	1925/26	1926/27	1927/28	1928/29	1929/30	1930/31	1931/32	1932/33	1933/34	1934/35	1935/36	
Group I	Disease Arrested	78	18	8	6	3	22	16	33	23	31	39	36	19	26	32	31	19	22	18	18	17	32	25	19	21	26	Alive
		46	7	4	—	1	6	4	5	2	7	4	8	7	7	3	2	4	4	3	—	—	—	1	1	—	1	Dead
		21	—	2	—	3	2	—	3	1	1	2	3	1	3	3	2	—	1	3	—	—	1	—	—	—	—	Lost sight of
	Much Improved	7	—	—	13	3	1	10	7	6	1	1	—	4	5	7	4	—	2	4	—	—	1	—	4	1	2	Alive
		4	—	2	4	4	—	3	—	1	3	—	—	2	—	2	—	—	2	—	1	—	—	—	—	—	—	Dead
		2	—	—	2	1	1	1	1	1	2	—	2	—	—	1	—	—	—	1	—	—	1	—	—	—	—	Lost sight of
	Improved	2	1	—	2	2	—	—	1	—	4	2	2	1	1	1	3	1	2	2	1	1	—	1	2	—	—	Alive
		2	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	Dead
		—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	Lost sight of
	Stationary or Worse	1	—	3	—	—	—	—	—	1	1	—	—	—	1	—	—	1	1	1	—	1	—	—	—	—	—	Alive
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Dead
		2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	Lost sight of
II	Disease Arrested	16	2	3	—	1	4	6	8	17	8	6	15	3	7	8	6	4	7	5	4	10	14	17	13	19	26	Alive
		13	4	1	1	—	7	3	8	7	4	2	6	4	1	1	5	1	2	3	2	4	2	1	1	—	—	Dead
		4	3	—	1	—	1	—	3	3	—	3	1	—	1	—	—	—	1	—	—	—	—	—	—	—	—	Lost sight of
	Much Improved	7	3	1	—	7	1	7	20	25	3	—	1	—	3	5	2	2	3	3	1	5	4	6	21	24	12	Alive
		19	5	1	2	3	3	3	7	4	—	—	1	—	—	—	1	1	1	—	1	—	—	1	2	—	—	Dead
		4	1	—	2	1	1	1	1	4	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of

Group	Improved	2	—	1	3	—	—	2	4	5	3	1	—	2	1	2	2	2	1	3	4	1	2	1	3	7	5	Alive
		4	1	—	1	1	1	—	4	1	—	—	1	—	—	1	1	—	1	1	—	—	2	—	—	—	—	Dead
		—	—	—	—	—	—	1	—	—	2	—	2	—	—	—	1	1	—	1	—	—	—	—	—	—	—	Lost sight of
	Stationary or Worse	3	—	2	1	—	2	—	2	3	—	1	—	—	1	—	1	—	—	2	—	—	1	—	—	—	—	Alive
		3	1	—	—	1	2	1	2	2	—	—	—	—	1	1	—	—	2	1	2	2	2	—	—	—	—	Dead
		—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
Group III	Disease Arrested	—	—	1	—	—	—	—	—	1	1	2	4	3	2	1	2	—	—	—	—	—	—	—	3	1	—	Alive
		—	—	—	—	—	—	—	1	—	—	—	5	1	4	—	—	1	—	—	—	—	—	—	—	—	—	Dead
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Much Improved	1	—	—	1	—	1	—	2	1	2	1	1	1	—	2	1	—	2	—	—	—	—	1	7	3	2	Alive
		4	1	2	—	1	—	—	3	4	4	—	—	1	1	1	—	1	—	—	—	—	—	—	2	—	—	Dead
		1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Improved	—	—	—	—	—	—	—	1	—	—	1	1	—	—	—	1	2	—	1	1	1	1	—	—	2	1	Alive
		2	1	—	—	—	2	—	—	2	1	—	3	1	3	—	2	1	—	—	—	—	1	—	6	1	—	Dead
		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Stationary or Worse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	Alive
		—	—	—	1	2	1	—	—	3	—	—	—	—	—	1	—	—	—	1	—	1	—	2	3	2	—	Dead
		—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Lost sight of
	Summary	117	24	19	26	16	31	41	78	82	54	54	60	33	47	58	53	31	40	39	29	36	55	51	74	80	74	Alive
		97	20	10	9	13	22	14	30	26	19	6	24	17	17	10	11	9	13	9	6	7	7	5	15	3	1	Dead
		34	4	2	6	6	6	3	9	11	5	6	9	1	4	4	6	1	2	5	—	1	2	—	—	—	—	Lost sight of
	TOTAL	248	48	31	41	35	59	58	117	119	78	66	93	51	68	72	70	41	55	53	35	44	64	56	89	83	75	